

PATENT EXAMINATION BOARD

PRACTICAL LEGAL PROBLEMS – GROUP 2(f)

[SUPPLEMENTARY EXAMINATION]

OCTOBER 2024

Examiners: J Whittaker
D Dohmen

Moderator: R Bagnall

Time: Reading Time - **1 Hour**
Examination Time - **4 Hours**
Total - **5 Hours**

Total Marks: 100

This paper consists of 10 pages (including this cover page) and includes 4 main questions.

This paper also includes 3 annexures, namely:

- (i) Annexure POC – Particulars of Claim (4 pages);
- (ii) Annexure A – ZA 2010/05431 (11 pages); and
- (iii) Annexure Q.3 – An extract from the Patents Register for ZA2017/01234 (2 pages).

Instructions:

- i. Answer all 4 questions; and
- ii. Write legibly.

NOTES TO CANDIDATES:

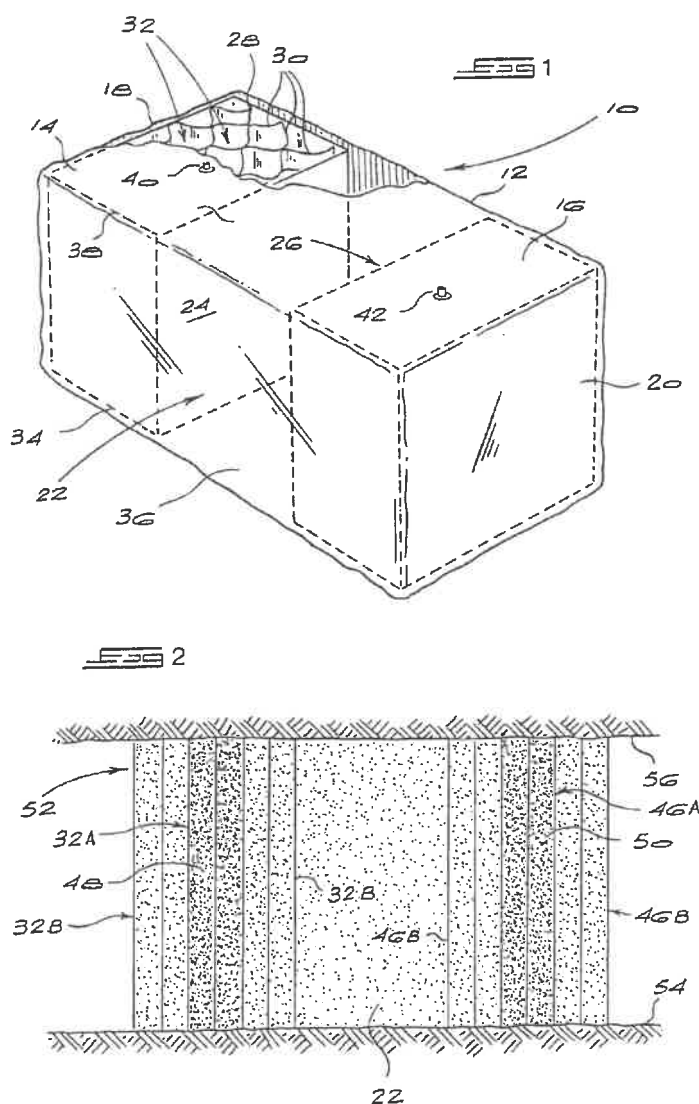
1. Attached to this paper are copies of the following documents:
 - (i) A copy of the Patents Act No. 57 of 1978;
 - (ii) A copy of the Patent Regulations 1978; and
 - (iii) A copy of the Uniform Rules of the High Court under the Superior Courts Act 10 of 2013 (Rules 6, 14, 17, 18, 19, 21, 22, 23, 24, 25, 30, 35, 36 and 37).
2. Each candidate is also allowed access to one dictionary during the Exam.
3. Prior to the handing out of the answer papers, candidates will have an opportunity to read the above documents and make notes for 60 minutes.
4. Where appropriate, reference should be made to case law, and conclusions should be supported by reasons and arguments.

Your client writes to you as follows:

“Dear Patent Attorney,

My company, V.J. Mining Supplies (Pty) Ltd, manufactures and supplies mining equipment. We have developed a mine support capable of bearing a compression load between a hanging wall and a footwall in a mine working.

Our mine support is shown in the drawings below, in which Figure 1 is a perspective view of the support, and Figure 2 is a schematic side view of the support, in use.



As can be seen in the drawings, our mine support 10 comprises an outer bag 12 and a pair

of support members 14 and 16 located within the bag 12, adjacent respective ends 18 and 20 of the bag. A compartment 22 is defined between the sides 24 and 26 of the spaced-apart support members 14 and 16.

The support members 14 and 16 are similar in design. With reference to Figure 1, the support member 14 consists of a tube 28 of a flexible material divided by dividing walls 30 into an array of compartments 32 running the length of the tube 28. The compartments 32 are arranged in rows and columns so that the tube 28, divided by the dividing walls 30, has a honeycomb structure. A first end 34 of the tube 28 is located on a base 36 defined by the outer bag 12, and a second end 38 is located above the first end 34.

The bag 12 includes an inlet 40 positioned near the end 18 of the bag to allow filler material to be introduced into the tube 28. Likewise, an inlet 42 is provided adjacent the end 20 of the bag 12 for introducing filler material into the tube of the support member 16.

With reference also to Figure 2 of the drawings, in use, some of the compartments 32A and 46A at the centre of the tubes in the support members 14 and 16 are filled with a first load bearing material, for example a cementitious grout, slimes modified with suitable chemicals, mine tailings, ash or crusher sand or the like so that central pillars 48 and 50 with suitable load bearing capabilities are formed in the centre of the tubes in the support members 14 and 16. These central pillars 48 and 50 provide initial load bearing capacity to the mine support 52.

Thereafter, the remainder of the compartments 32B and 46B are filled with a second load bearing material, such as mine slimes or backfill, which has a much lower load bearing capacity. Once the compartments 32B and 46B of the respective tubes are filled, the slimes or backfill will then spill over into the central compartment 22 between the two support members 14 and 16. The filling process is continued until the whole bag 12 is filled with filler material.

The first load bearing material and the second load bearing material are pumped into the outer bag 12 in a conventional fashion, and the bag 12 includes a valve (not shown) near the top thereof to allow water to escape from the outer bag as the second load bearing material settles and densifies.

As illustrated in Figure 2, the mine support 52 is suitable for use as a load bearing support between a footwall 54 and a hanging wall 56 in an underground mine, and is capable of receiving compressive loads as the footwall and the hanging wall converge over time.

We commenced marketing our mine support under the name "*Honeycomb Bag*" at the beginning of 2024, and we have been selling this product to various gold mines in South Africa for about eight months. The Honeycomb Bag has been performing well, and the demand for this mine support has been increasing steadily.

However, yesterday I received a summons regarding infringement of South African patent 2010/05431 by my company. Attached marked "**Annexure POC**" is a copy of the particulars of claim attached to the summons, and attached marked "**Annexure A**" is a copy of the specification of the South African patent (ZA 2010/05431) which appears to be owned by Innovative Mine Supports (Pty) Ltd.

Given the increasing demand for our product, it is important for us to continue manufacturing and supplying the Honeycomb Bag in South Africa.

Please advise us as to our position and the best way forward.

Yours sincerely,

V.J Mining Supplies (Pty) Ltd"

You conduct some background checks and establish that:

- (a) ZA 2010/05431 was filed on 12 August 2010 claiming priority from an earlier South African patent application which was filed on 13 August 2009;
- (b) All formalities in respect of ZA 2010/05431 were correctly complied with; and
- (c) ZA 2010/05431 is currently in force.

QUESTION 1

(30 marks)

Please provide your client with detailed advice on whether or not the manufacture and sale by your client of the Honeycomb Bag in South Africa amounts to infringement of the claims of ZA 2010/05431.

QUESTION 2

(30 marks)

V.J. Mining Supplies (Pty) Ltd advises you that mine supports in the form of grout bags and grout packs have been known for many years and provides you with copies of the following documents which disclose mine supports similar to the grout bag assembly of ZA 2010/05431 [**Exam Note:** the actual documents **D1** to **D4** are not attached and the below conclusions should be accepted as correct]:

- (i) US 7,269,430, published on 28 June 2006 ("**D1**");
- (ii) US 6,182,530, published on 7 March 1997 ("**D2**");
- (iii) US 8,298,031, published on 4 October 2009 ("**D3**"); and
- (iv) WO 2005/09634, published on 12 January 2006 ("**D4**").

You consider each of these documents and conclude that claims 1 to 3 of ZA 2010/05431 lack novelty in light of **D1**; claims 1 to 4 of ZA 2010/05431 lack novelty in light of **D3**, claims 3 to 6 of ZA 2010/05431 lack inventiveness in light of **D2** and **D4**, and claims 5 and 7 lack inventiveness in light of **D1** and **D3**.

In light of your answer to Question 1 and the information immediately above, please prepare a plea to the particulars of claim and, if appropriate, a counterclaim for your client.

QUESTION 3

(20 marks)

You receive the below letter from your client.

"Dear Colleagues

We refer to your email of 3 September 2024 advising us that our client's South African patent no. 2017/1234 had lapsed as a result the 2022 renewal fees were not paid.

As requested, our client and us have investigated the matter and we can report as follows.

Our client's inhouse legal advisor raised concerns about the status of the South African patent in August this year after an internal status review of all our client's patents. We contacted you at the end of August to confirm the status of the patent on our client's request.

Our client's previous patent attorneys, James and Co. handled the priority application, the international (PCT) patent application as well as the various national phase entries of the patent family. They instructed SA Patent Inc to enter the national phase in South Africa. James and Co. were responsible for keeping our client's patents in force and normally sent reminders to our client a few months before the relevant renewals fell due. Over the years our client instructed James and Co. to renew the patent as it covered one of our client's popular products which it is exporting to and selling in South Africa.

In June 2022 our client changed representation to our firm and requested James and Co. to transfer all their matters to us and to also let us know of any upcoming deadlines on any of the matters. During August and September 2022, we received the schedules and files and entered those onto our records. As best we can ascertain, James and Co. did not send any details of the patent to us and the patent was not entered onto our records. Accordingly, we did not send any renewal reminders to our client and did not attend to the renewal of the patent. Our client could also not find any record of renewal reminder on the patent which they received from James and Co.

Our client has no internal diary system for the renewal of their patents and assures us that they would have renewed the patent if they received a renewal reminder.

We understand from your email that our client can apply for the restoration of the patent. Please proceed with the restoration application and let us know if you require any additional documents or information from us in order to do so.

Yours Faithfully

*Sue Themall
Renewals Administrator
US IP Inc.*

A copy of the P2 extract with relevant information taken from the Patent Office Register in respect of ZA2017/1234 is attached hereto marked "**Annexure Q.3**".

Please draft the necessary affidavit(s) in support of the restoration application.

QUESTION 4

(Total 20 marks)

Please advise your client on each of the below separate questions.

4.1 Your client has filed a patent application in South Africa that includes the following claims:

1. A compound of Formula "X1".
2. A method of treating a patient in need thereof for muscular pain by applying the compound of claim 1 topically to the affected area.
3. The method of claim 2 where the muscular pain is as a result of a muscle strain.

After the filing of the application your client advises you that, following the examination of corresponding applications in examining countries, it has emerged that the compound of Formula "X1" forms part of the state of the art prior to the priority date of your client's patent application. Furthermore, it was also known prior to the priority date of your client's patent application that the compound of Formula "X1" was used for the treatment of skin rashes.

In the circumstances, please advise your client on what amendments to the claims would be advisable prior to the grant of the South African patent application.

(5 marks)

4.2 You received the below email from your client. Please advise your client.

"We are in the process of appointing an exclusive distributor in Gauteng to market and sell our surveillance drones which incorporate our patented location and stability control systems. We would like to include terms dealing with the following aspects in the distribution agreement. Would there be any legal concerns if we do so and do you have any alternative proposals:

- a. that the distributor assigns any improvements which it or its employees may make to the drones to us;*
- b. that the distributor sells a minimum number of drones per year to maintain its exclusivity for the Gauteng area;*
- c. that the distributor undertakes not to dispute our patent rights and the validity of our patent in the location and stability control systems;*

- d. *that the distributor purchases all spare parts for the drones such as blades, rotor motors, blade guards, cameras, control units, body parts and stands from us; and*
- e. *That the distributor sells the drones at a recommended retail sales price."*

(5 marks)

- 4.3 Your client advises you that their biggest client (Runscared (Pty) Ltd) has received a letter of demand from a competitor, Agrisiv (Pty) Ltd. In the letter Agrisiv makes claims that your client's bestselling product infringes Agrisiv's South African patent which is identified in the letter.

Runscared is not interested in getting involved in any patent disputes and is in the process of cancelling all pending and future orders from your client. Runscared indicated that they will in future only order products from Agrisiv.

Your client reports that other products which are identical to your client's products have been available internationally for many years before the patent was first applied for. Your client is very concerned about the state of affairs and requires your advice on what it can do to address the situation. Please advise on options available to your client and provide practical advice to your client.

(5 marks)

- 4.4 Your client advises you as follows:

"I confirm that I have received the final version of my replying affidavit in the pending South African patent revocation application. As you know I live in California, United States and will have to sign the affidavit here and courier it back to you. Please confirm how I should go about in order to have the affidavit correctly signed."

Please respond to your client and explain your reasons for the response.

(5 marks)

TOTAL: 100 marks

Annexure POC

PARTICULARS OF PLAINTIFF'S CLAIM

1. The Plaintiff is INNOVATIVE MINE SUPPORTS (PTY) LTD, a private company incorporated according to the laws of the Republic of South Africa, having its registered office address at 22 Visser Road, Centurion, Gauteng, Republic of South Africa.
2. The Defendant is V.J. MINING SUPPLIES (PTY) LTD, a private company incorporated according to the laws of the Republic of South Africa, having its registered office address at 57 6TH Street, Pretoria, Gauteng, Republic of South Africa.
3. The Defendant manufactures and supplies mining equipment, including mine supports, in South Africa.
4. The Plaintiff is the registered proprietor of South African patent 2010/05431 e n t i t l e " M I N E S U P P O R T G R O U T B A G S A N D G R O U T P A C K S " t h e " p a t e n t ") .
5. The patent is valid and in full force and effect.

Annexure POC

6. A copy of the specification of the patent is attached marked “**Annexure A**”.
7. From a date which presently is unknown to the Plaintiff, the Defendant has, without the authority of the Plaintiff, manufactured and sold to various mines in South Africa, a mine support under the name “*Honeycomb Bag*” (**the Defendant’s product**” .)
8. T h e D e f e n d a n t ’ s p r o d u c t s f a l l s w i t h i n t h e s c o p e o f e a c h o f c l a i m s 1 t o 8 o f t h e p a t e n t .
9. In support of the foregoing, the Plaintiff will rely on the sale of the D e f e n d a n t ’ s p r o d u c t , b y t h e D e f e n d a n t , t o S o u t h D e e p G o l d M i n e , K l o o f G o l d M i n e a n d E a s t D r i e f o n t e i n M i n e i n S o u t h A f r i c a .
10. Accordingly, the manufacture and sale of t h e D e f e n d a n t ’ s p r o d u c t amounts to an infringement of the claims of the patent.
11. The Plaintiff apprehends upon reasonable grounds that the Defendant will not desist from its infringement of the patent unless restrained by an order of the above Honourable Court.

Annexure POC

12. As a result of the Defendant's infringement of the suffered, and will continue to suffer, damages in an amount which the Plaintiff is at present unable to quantify.

WHEREFORE the Plaintiff claims:

- (a) an interdict restraining the Defendant from infringing South African patent 2010/05431;
- (b) an order directing the Defendant to deliver up to the Plaintiff for destruction all infringing products in the Defendant's possession or under its control;
- (c) an order directing:
 - (i) an enquiry be held into any damages suffered by the Plaintiff as a result of the Defendant's infringement of the patent and/or as to what is a reasonable royalty; and
 - (ii) the Defendant to make payment to the Plaintiff of any damages found to have been suffered by the Plaintiff pursuant to such enquiry;

Annexure POC

- (d) in the event of an enquiry in terms of sub-paragraph (c)(i) above being ordered and the parties being unable to reach agreement as to the future pleadings to be filed and as to discovery, inspection and/or other matters of procedure in relation to the enquiry, an order authorising either the Plaintiff or the Defendant to make application to the above Honourable Court for directions in regard thereto;
- (e) an order that the costs of the action be paid by the Defendant, including the costs of two counsel and the qualifying fees of the Plaintiff's on the PC scale; and t n e s s
- (f) further and/or alternative relief.

SIGNED AT PRETORIA THIS 19TH DAY OF OCTOBER 2024.

Formidable

FORMIDABLE ATTORNEYS
Plaintiff's Patent Attorneys
PRETORIA

ZA 2010/05431

These include timber poles, timber and composite packs, steel props, unmined ore pillars, rock anchors and granular or tailings type supports.

Among granular support media, cemented grout packs are used as combination support products. These consist essentially of a support column formed by cured cemented backfill or other suitable cured cementitious grout which is contained within a geotextile bag and generally stiffened with external restraining rings or metal mesh against lateral deformation or bulging during installation and during yielding under subsequent axial load.

Conventional grout bags are essentially closed geotextile containers, typically made of woven ribbons and monofilaments of polyethylene and polypropylene to provide required filtering characteristics to retain solid particles whilst allowing excess liquid to escape. Of course, it is also possible that the grout bag could be water impervious if the unset cementitious grout is sufficiently devoid of any excess moisture. The bag has some form of unidirectional valve for inflating it with slurry under pressure. The bags also typically have some means of suspending them on support structures within the stopes using ties or loops to facilitate their installation. Once the bags have been inflated with slurry, typically as a grout, the material needs to cure or set to develop sufficient strength to carry load.

However, not all grades of tailings are suitable for use as grout for inflating such a grout bag and, in particular, the fines or slimes as they may be termed would, if they could be used practically, require uneconomical amounts of cementitious material to be admixed therewith. Accordingly, the use of grout bags to form grout packs, whilst it does assist in the disposal of some of the tailings generated consequent on the mining operations, it does not assist as regards the disposal of tailings having a fine particle size.

OBJECT OF THE INVENTION

It is an object of this invention to provide an underground support of the general nature of a grout bag or grout pack which may, at least to some extent, alleviate the difficulty of disposing of tailings that are unsuitable for use in a grout mixture used for forming grout packs.

SUMMARY OF THE INVENTION

In accordance with this invention there is provided a grout bag assembly comprising an inflatable grout bag having a top, bottom and generally cylindrical sidewall with an inlet for fluent settable grout material, the grout bag having, in an expanded condition, an axis extending between the top and bottom thereof, the grout bag assembly being characterised in that the grout bag has an inner bag attached thereto wherein the grout bag and inner bag are arranged such that upon filling of the grout bag the inner bag forms a generally axially extending separate compartment within the grout bag.

Further features of the invention provide for the inner bag to have a separate inlet accessible from the exterior of the grout pack; for the inner bag to be attached to the inside of the grout bag such that a space of optionally varying radial size is formed between the inner surface of the grout bag and the outer surface of the inner bag; the inner bag optionally being attached to the grout bag by an operatively upwardly extending tie arrangement at angularly spaced positions around the cylindrical sidewall, wherein each tie arrangement is preferably provided with apertures enabling fluent settable grout material to flow through the tie arrangement; for the grout bag itself to have at least a sidewall that is permeable to liquid so that excess water or the like contained in fluent settable grout material can drain through the sidewall, that may be a geotextile material; and for the inner bag to be made of a liquid impermeable material so that it may be used to contain a slurry having a liquid component which may be harmful to the set grout

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material in the grout bag, or harmful if it is allowed to be released into a stope or other environment in which the grout pack is installed, in use.

Still further features of the invention provide for each of the grout bag and inner bag to have a unidirectional valve-controlled inlet; and for a reinforcing structure in the form of external restraining rings or metal or other mesh to be provided around the grout bag to control bulging thereof in use and further to control collapse of a grout pack during the yielding process.

In order that the invention may be more fully understood, an embodiment thereof will now be described with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

Figure 1 is a schematic sectional elevation of an embodiment of a grout bag assembly or grout pack according to the invention in the installed condition between a hanging wall and a footwall;

Figure 2 is a schematic sectional plan view of the grout bag assembly of the invention illustrated in Figure 1;

Figure 3 is a schematic isometric view of the grout bag assembly illustrated in Figures 1 and 2 with the top thereof partly broken away; and

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Figure 4 is the same as Figure 3 but shows the grout material present within the grout bag and unset slurry material within the inner bag.

DETAILED DESCRIPTION OF AN EMBODIMENT OF THE INVENTION

In the illustrated embodiment of the invention, a grout bag assembly, generally indicated by numeral (1), includes a grout bag (2) made of a water permeable geotextile material that is adapted to retain a grout comprising granular material and a binder introduced into it, but to allow excess water to drain away from the grout material. Of course, should the composition of the fluent setttable grout material be appropriate, the grout bag could be impervious to water. In either event, the grout bag has a generally circular cylindrical shape with a top (4), bottom (6) and sidewall (8). A unidirectional valve-controlled inlet (10) is provided in the sidewall (8) near the top (4) in conventional fashion.

The general construction of the grout bag and the materials used may be the same as those used currently for existing grout bags and the details need not be further described herein. The maximum height of such a bag taken along its axis "A" will depend on the height of the hanging wall to be supported and is typically in the range of about 800 mm to 1500 mm.

As provided by this invention, an inner bag (14) is located generally coaxially within the grout bag to extend up the entire operative height thereof and is attached to the grout bag by a tie arrangement (16) at equally angularly spaced positions, in this instance seven different positions, around the cylindrical sidewall. The tie arrangement generally assumes the form of a suitable strip of material that has apertures to enable fluent setttable grout material to flow through it so that filling of the entire grout bag can take place

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by way of the single inlet valve (10). This arrangement is such that the inner bag forms a generally axially extending separate inner compartment (18) within the grout bag when the grout bag is filled by way of the inlet valve (10). A valve controlled inlet duct (20) bridges the gap between the sidewall of the grout bag and the inner bag to provide an inlet to the interior of the separate inner compartment (18) formed by the inner bag.

The inner bag is, in this instance, made of a liquid impermeable sheet material so that it may be used to contain a slurry or liquid component which may be harmful to the set grout material in the grout bag, or, alternatively, harmful in one way or another if it is allowed to be released into an operations area such as a stope or other environment in which the grout pack is installed. A suitable material for the inner bag is considered to be a fabric reinforced PVC or other suitable waterproof material.

With the arrangement illustrated in Figures 1 to 4, the flexible sheet material of the inner bag is largely unsupported between the series of ties and, this being so, when the grout bag itself is filled with fluent settable grout material, the inner bag bulges inwards between the upwardly extending tie arrangements to provide a tubular grout wall that varies angularly in radial dimension and, in fact, forms segments of double convex shape in section, as shown clearly in Figure 2.

It will be noted that the fluid grout, during introduction thereof can flow freely past the tie arrangement to fill the entire space between the grout bag sidewall and the inner bag.

After initial installation of the grout bag in the manner indicated above, the settable grout material is allowed to set prior to introducing any slurry or other fluid material into the inner bag by way of the valve controlled inlet

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duct (20). The material introduced into the inner bag will generally not be structural in any way as it will typically contain extremely fine tailings, such as the type often referred to as slimes.

As shown in Figure 4, an external reinforcing structure in the form of axially spaced external restraining rings (22) or metal or other mesh (24) may be provided around the grout bag, as may be determined according to requirements, to control outwards bulging thereof in use and further to control collapse of a grout pack during the yielding process.

It will be appreciated that the attachment of the inner bag to the grout bag could vary considerably, particularly as regards the number of positions of the tie arrangements or other attachments used for locating the inner bag relative to the grout bag.

Numerous other variations and embodiments of the invention are possible without departing from the scope hereof.

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CLAIMS:

1. A grout bag assembly comprising an inflatable grout bag having a top, a bottom, and a sidewall extending between the top and the bottom to define an internal space within the grout bag, wherein the grout bag assembly includes at least one internal wall extending within the internal space between the bottom and the top of the grout bag to divide the internal space into at least two compartments that extend from the bottom to the top of the grout bag, and wherein the grout bag includes at least one inlet for introducing a fluent settable grout material into the two compartments in the internal space.
2. A grout bag assembly as claimed in claim 1, in which one of the compartments is formed by an inner bag within the grout bag, wherein the grout bag and the inner bag are arranged such that, upon filling of the grout bag, the inner bag forms a separate compartment within the grout bag.
3. A grout bag assembly as claimed in claim 1 or claim 2, in which the inner bag has a separate inlet accessible from the exterior of the grout pack.
4. A grout bag assembly as claimed in any preceding claim, in which the inner bag is attached to the inside of the grout bag such that a space of optionally varying size is formed between the inner surface of the grout bag and the outer surface of the inner bag.
5. A grout bag assembly as claimed in claim 4, in which the inner bag is attached to the grout bag by an operatively upwardly extending tie arrangement at angularly spaced positions around the sidewall, wherein each tie arrangement is provided with apertures

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enabling fluent settable grout material to flow through the tie arrangement.

6. A grout bag assembly as claimed in any of claims 2 to 5, in which the inner bag is made of a liquid impermeable material.
7. A grout bag assembly as claimed in any of claims 2 to 6, in which each of the grout bag and the inner bag has a unidirectional valve-controlled inlet.
8. A grout bag assembly as claimed in any one of the preceding claims, in which a reinforcing structure in the form of external restraining rings or metal mesh is provided around the grout bag to control bulging thereof in use and collapse of a grout pack during yielding thereof.

1/2

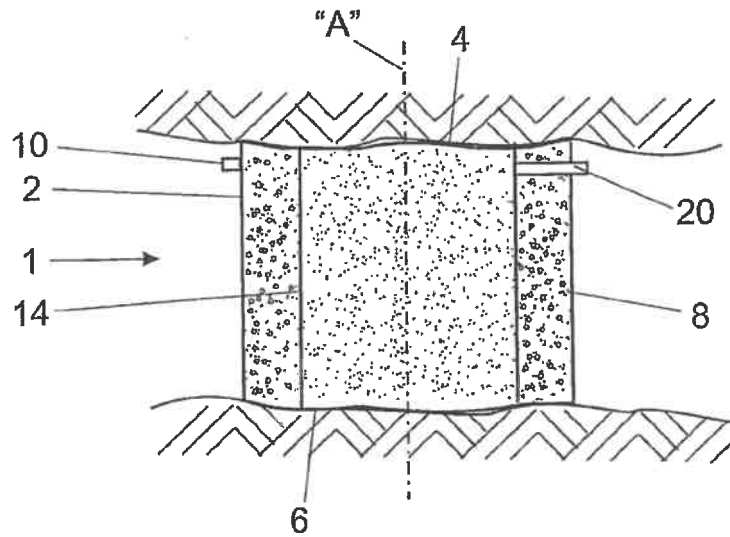


Figure 1

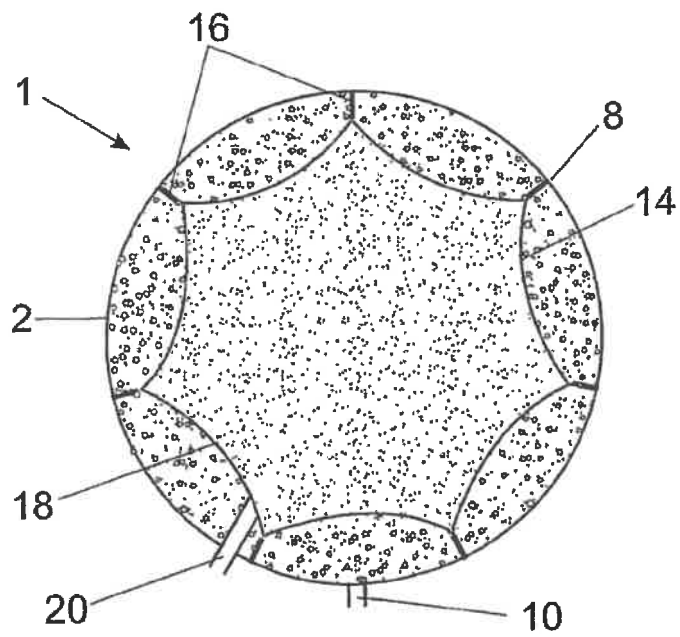


Figure 2

2/2

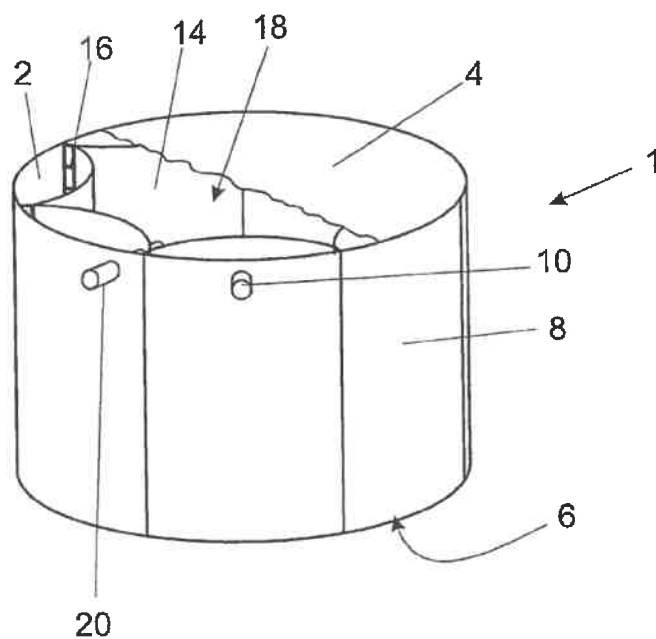


Figure 3

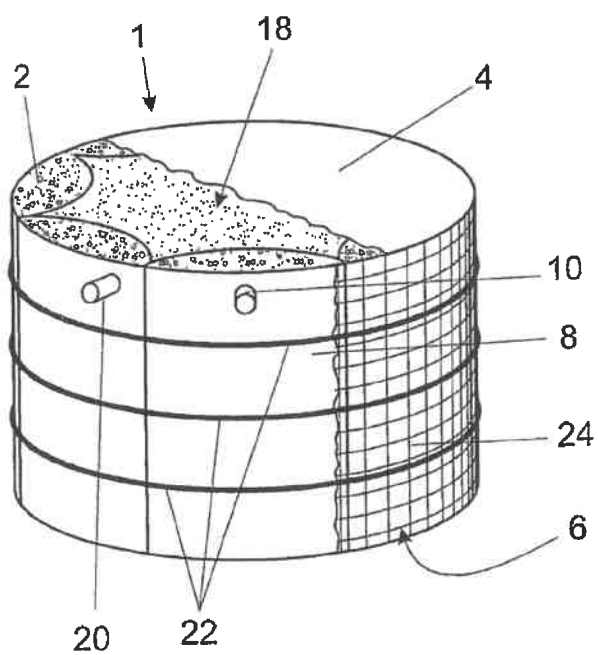


Figure 4

“Annexure Q.3”

FORM P.2

REPUBLIC OF SOUTH AFRICA				REGISTER OF PATENTS				PATENTS ACT, 1978				
OFFICIAL APPLICATION NO.				LODGING DATE: PROVISIONAL				ACCEPTANCE DATE				
22	01	2017/01234		22				47	4 September 2017			
INTERNATIONAL CLASSIFICATION				LODGING DATE: COMPLETE				GRANTED DATE				
	E21D				10 April 2017				27 November 2017			
FULL NAME(S) OF APPLICANT(S)/PATENTEE(S)												
71												
JENNMAR CORPORATION												
APPLICANTS SUBSTITUTED:								DATE REGISTERED				
71												
ASSIGNEE(S)								DATE REGISTERED				
71												
FULL NAME(S) OF INVENTOR(S)												
72												
JOHN C. STANKUS and JOHN G. OLSEN												
PRIORITY CLAIMED BY PCT INTERNATIONAL APPLICATION PCT/US2015/01111 FILED 15 October 2015 (WO2016/058431)				COUNTRY		NUMBER		DATE				
N.B. Use International Abbreviation for country (See Schedule 4)				33	US		31	10/687,960		32	17 OCTOBER 2014	
TITLE OF INVENTION												
54	YIELDABLE PROP											
ADDRESS OF APPLICANT(S)/PATENTEE(S)				PITTSBURGH, PA, US								
ADDRESS FOR SERVICE								SAP REF:		PA0000ZA00		
74	SA Patents Inc, Pretoria											
PATENT OF ADDITION TO NO.				DATE OF ANY CHANGE								
61												
FRESH APPLICATION BASED ON				DATE OF ANY CHANGE								

AMENDMENTS AND RECTIFICATIONS, ETC.								
Document	Date of Application	Advertisement Date	Opposition Date	Allowance or refusal	Date of latter			
PROCEEDINGS BEFORE THE COMMISSIONER OF PATENTS					Appeals to Supreme Court TPD/AD	Date Withdrawn		
Nature	Taken by:	Against	Date commenced	Date of order				
LICENCES, ATTACHMENTS AND HYPOTHECATIONS								
Nature	In favour of:				Date registered	Date cancelled		
RENEWALS				RESTORATIONS				
Year	Date paid	Receipt	Penalty	Date Applied For	Advertised	Opposed	Restored by	Date of restoration
15/10/18	3/10/18	5961	-					
15/10/19	14/10/19	6035	-					
15/10/20	20/09/20	8791	-					
15/10/21	17/09/21	20356	-	REMARKS: (FOR OFFICE USE ONLY)				