

## 2009 PAPER P4

### SAMPLE SCRIPT A

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#### **Claims**

1. A disposable toothbrush comprising an elongate handle having a finger grip at one end and a bristle-carrying head adjacent the other end of the handle, the handle having a recess covered by a thin flexible membrane to form a reservoir for toothpaste wherein, in use, the toothpaste may be extruded from the reservoir onto the bristles by a user pressing on the membrane.
2. A disposable toothbrush comprising an elongate handle having a finger grip at one end and a bristle-carrying head adjacent the other end of the handle, the handle having a recess occupied by a thin flexible membrane bag to form a reservoir for toothpaste, wherein, in use, the toothpaste may be extruded from the reservoir onto the bristles by a user pressing on the membrane bag.
3. A disposable toothbrush according to claim 2 wherein the membrane bag is retained in the recess by a pair of oppositely disposed lips formed in the handle and extending along the length of the recess.
4. A disposable toothbrush according to any preceding claim wherein the reservoir extends most of the length of the handle.
5. A disposable toothbrush according to any preceding claim wherein the finger grip has transversely extending ribs and the handle has longitudinally extending ribs on a side of the handle opposite from the reservoir, whereby the finger grip at one end of the handle may be held by one hand to use the toothbrush and the toothpaste may be extended from the reservoir to the bristles by gliding the other hand, guided by the longitudinally extending ribs, along the reservoir from the finger grip toward the head and into the bristles.
6. A disposable toothbrush according to any preceding claim wherein the head has a passage in fluid communication with the reservoir, extending from the handle to a single opening formed in the head among the bristles.
7. A disposable toothbrush according to any preceding claim and having a removable pull tab disposed adjacent to the opening in the head and adapted to seal any toothpaste in the head, so that upon removal of the pull tab, any toothpaste contained in the reservoir may be extruded through the opening in the head to the bristles.
8. A disposable toothbrush according to any preceding claim wherein the head is separable from the handle.
9. A kit comprising a disposable toothbrush according to any preceding claim and a housing for encasing the toothbrush when not in use.

10. A disposable toothbrush substantially as herein described with reference to the accompanying drawings.

### **Divisional**

A disposable toothbrush comprising an elongate handle having a finger grip at one end and a bristle-carrying head adjacent the other end of the handle in which the toothbrush has an integrated reservoir adopted to receive a predetermined volume of toothpaste sufficient for a single application of toothpaste to the bristle region wherein the toothbrush comprises a removable pull-tab to seal the toothpaste until the toothbrush is required.

### **Letter to Patent Office**

Dear Sirs

*UK Application No 0666666.6*

I write in response to the official letter on the above case and file herewith new claims 1 to 10.

### ***Amendments and basis***

#### Claim 1

The phrase 'for single use' has been removed from claim 1. Page 8, line 20 makes it clear that the brush was not just for single use.

The passage "a plurality of ... defined by the head" has been deleted. Page 4, lines 24-25 provide basis for the claim without that passage included.

The final passage has been deleted and replaced by the feature of a recess covered by a thin flexible membrane to form a reservoir, wherein, in use, the toothpaste may be extruded from the reservoir by a user pressing on the membrane. Basis for that is found on p4, 126-29 (recess covered by membrane to form reservoir) and p5, 11-2 & old claim 5 (user pressing on membrane extrudes toothpaste & toothpaste extruded from reservoir onto bristles).

Claim 2 is a second independent claim, similar to claim 1, but with the recess occupied with a membrane bag. The basis is found in the same places as for claim 1. Note p7, 116-17 clarifies that the membrane is thin and flexible.

Claim 3 recites the membrane bag being retained by lips. Basis for that is at p7, 117-19. It is clear that the 'capsule' is the membrane bag.

Claim 4 recites the reservoir extending most of the length of the handle. Basis is at p6, 19-10 and old claim 3. The figures show that the feature applies to both embodiments.

Claim 5 is based on previous claim 5.

Claim 6 recites a single opening. Basis for that is in previous claim 3 and p5, 11.

Claim 7 is based on previous claim 4.

Claim 8 has basis at p8, 124-25.

Claim 9 has basis at p8, 128-30.

Claim 10 is an omnibus claim.

### ***Unity***

Claims 1 and 2 are separate independent claims but share a single inventive concept, namely that the reservoir in the handle comprises a membrane that the user can press to extrude the toothpaste. Claims 1 & 2 relate to different layouts of the same invention and thus possess unity of invention.

### ***Clarity***

The removal of all references to a single use from claim 1 has been carried out in response to the Examiner's objection. The point is therefore understood to have been dealt with.

### ***Novelty***

Claim 1 is a novel over GB '222 because GB '222 does not teach a thin flexible membrane across the reservoir. The Examiner has noted that the bristles could be a reservoir. However that reservoir also is not covered by a thin flexible membrane and is not in the handle.

Claim 2 is novel over GB '222 because GB '222 does not disclose a thin flexible membrane bag.

Claims 1& 2 are novel over US '333 because US '333 does not teach a recess in the handle either covered by a membrane or containing a membrane bag. Dispenser 13 could be construed as a membrane, but it does not cover or occupy a recess in the handle.

Claims 3-9 are novel over GB '222 & US '333 at least by virtue of their dependency.

Claim 10 is novel over GB '222 & US '333 because neither GB '222 nor US '333 show a toothbrush having the features of either of the described embodiments, in particular the reservoir having a membrane.

### ***Inventive Step***

Claim 1 is distinguished from GB '222 in that it has a reservoir covered by a thin flexible membrane and pressing on the membrane extrudes toothpaste onto the bristles. Claim 2 is distinguished by the thin flexible membrane bag forming the reservoir, pressing on which causes extrusion of the toothpaste.

The advantage of both those distinguishing features is that they are simple to manufacture and hence suitable for a disposable toothbrush.

By contrast GB '222 has a complex piston arrangement. The skilled person would not modify the reservoir of GB '222 to have a flexible membrane covering or membrane bag because GB '222 already has a system for pushing the toothpaste, namely the piston. Moreover, if such a membrane covering or bag were used then the flex of the membrane would cause toothpaste to bypass the piston so it wouldn't work. Combining US '333 with GB '222 would not help because combining the documents would result in a flexible reservoir on the head charged by a piston reservoir in the handle.

The skilled person would not combine the documents because GB '222 is for multiple use brushes (p14, 14 from bottom) and US '333 for disposable brushes (p19, 16) but even if he did he would not therefore arrive at the invention of claim 1 or 2.

Claims 1 & 2 are distinguished from US '333 in that the flexible reservoirs are provided in the handle.

The advantage of that is the user can control how much toothpaste is applied.

The skilled man would not move the reservoir of US '333 to the handle because it would not then be squashed by the user pressing the brush against the teeth so no toothpaste would come out. Moreover if it did it would not come out on the bristles so the invention of claims 1 & 2 would still not be reached.

Combining with GB '222 would not help because the result would be as described above.

Claims 1 & 2 therefore have an inventive step over GB '222 and US '333 alone or in combination.

Claims 3 to 9 have an inventive step at least by virtue of their dependencies. Claim 10 has an inventive step at least by virtue of similar arguments to those for claims 1 & 2.

### ***Final Matters***

The applicant reserves the right to reintroduce any matter deleted by the accompanying amendments, in a divisional or otherwise.

The application is in order for allowance and early acceptance would be appreciated.

I hereby request accelerated prosecution of the application as an infringing product is about to be launched.

Yours, Candidate

### **Memo**

It was necessary to amend because GB '222 had all the features of claim 1, as described by the examiner. You are right that GB '222 is not necessarily disposable but claim 1 was only limited to a brush suitable for single use having a volume sufficient for 1 application. The toothbrush of GB '222 could be used once and thrown away and had a volume sufficient for one use (even though it was also sufficient for multiple uses).

I removed the single use statements and the details of the bristles from claim 1 because they were not essential to your invention and removing them may increase the scope to maximise protection.

I amended to the flexible reservoirs because they strike me as the essence of your invention, the part that makes it work and easy to manufacture. I didn't amend to the cap because you wish to pursue people having no cap. I didn't amend to the ribs or the method of squeezing because they seemed unduly limiting. Your brush would still work without the ribs.

I left the grip in claim 1 because there was no clear basis for removing it (the handle is always mentioned with the grip).

I included an independent claim to each embodiment. A unifying claim (e.g. a reservoir comprising a flexible membrane) risked extending beyond the original disclosure, which always referred to the two options and hence adding matter. I believe that the two claims have a single inventive concept so the Examiner shouldn't object to unity. If he does then one claim could be split into a divisional. It is more cost-effective to pursue both claims together for now.

The dependent claims did not provide a suitable amendment option. I have included some new dependent claims to provide better fallback positions.

I have requested accelerated prosecution, which should be granted due to the infringing product. We should hear back in about 3 months.

Once we have a granted patent we should send it to the infringer without making threats. By sending it after grant we prevent them delaying grant by filing observations.

You can either pursue them through the courts for an injunction, damages or account for profits, and delivery up, or negotiate with them perhaps about them paying you royalties.

We are unlikely to prevent launch because we must have a granted patent to enforce it. If it is granted before launch then an interim injunction may be possible (since the balance of convenience will lie in your favour). If not then an interim injunction is less likely.

By amending we may have affected the provisional protection available.

You could file a divisional to the proposed claim for the pull-tab. However, you would need to think carefully about whether it would give you commercially useful protection. It is based on p6, 122-23. I have not requested time to file it in the letter so as not to delay grant. Therefore if you want to go ahead with it you should inform me asap so that we can file it before grant.

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## 2009 PAPER P4

### SAMPLE SCRIPT B

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#### **Claims**

1. A disposable toothbrush comprising a elongate handle having a finger grip at one end and a bristle-carrying head adjacent the other end of the handle, a plurality of bristles extending transversely to the handle as a top side of the toothbrush, from a base for the bristles defined by the head, in which the handle has an integral reservoir adapted to receive a predetermined volume of toothpaste, wherein the head has a passage in fluid communication with the reservoir extending from the handle to an opening formed in the base of the head, and the reservoir has a thin flexible membrane accessible from one side of the handle for squeezing toothpaste from the reservoir to the head.
2. A disposable toothbrush according to Claim 1 in which the reservoir extends most of the length of the handle.
3. A disposable toothbrush according to Claim 1 or 2 in which the reservoir has a shallow elongate shape.
4. A disposable toothbrush according to any preceding claim in which the reservoir is formed in a recess in the handle.
5. A disposable toothbrush according Claim 4 wherein the thin flexible membrane acts as a cover for the recess to form the reservoir.
6. A disposable toothbrush according to Claim 4 wherein the thin flexible membrane forms a capsule which is placed in the recess.
7. A disposable toothbrush according to Claim 6 wherein the recess comprises a pair of oppositely disposed tips to retain the capsule in the recess.
8. A disposable toothbrush accords to any preceding claim in which said one side of the handle is the top side of the toothbrush.
9. -<same as claim 4 previously as file but dependent upon any preceding claim>

10. A disposable toothbrush according to any preceding claim in which the finger grip has transversely extending ribs.
11. A disposable toothbrush according to any preceding claim in which the handle has longitudinally extending ribs on a side of the handle opposite from the thin flexible membrane of the reservoir.
12. A disposable toothbrush according to any preceding claim wherein the finger grip can be held by one hand to use the toothbrush and the toothpaste extruded from the reservoir to the head by gliding the other hand along the reservoir toward the head and into the bristles.
13. A disposable toothbrush substantially as described herein within reference to Figures 1 - 4.
14. A disposable toothbrush substantially as described herein with reference to Figures 5 – 8.

### **Divisional Application 1**

#### Claim 1

A disposable toothbrush comprising a elongate handle having a finger grip at one end and a bristle-carrying head adjacent the other end of the handle, a plurality of bristles extending, transversely to the handle on a top side of the toothbrush, from a base for the bristles defined by the head, in which the toothbrush has a integral reservoir adapted to receive a predetermined volume of toothpaste, and the head has a passage in fluid communication with the reservoir extending from the reservoir to an opening formed in the base of the head, the toothbrush further having a removable pull tab disposed adjacent to the opening in the head and adapted to seal any toothpaste in the head.

### **Divisional Application 2**

#### Claim 1

A disposable toothbrush comprising a elongate handle having a finger grip at one end and a bristle-carrying head adjacent the other end of the handle, a plurality of bristles extending, transversely to the handle on the top side of the toothbrush, from a base for the bristles defined by the head in which the toothbrush has an integral reservoir adapted to receive a predetermined volume of toothpaste and the handle has longitudinally extending ribs on the bottom side of the toothbrush.

### **Letter to UK IPO**

Dear Sirs,

I refer to the outstanding examination report on this case and attach amended claims to replace the claims currently on file.

## ***Amendments***

Claim 1 has been amended to remove the phrases “for single use” and “sufficient for a single application of toothpaste to the bristle region”.

It is clear from page 4 lines 23 to 26 that it is not an essential feature of the invention that the toothbrush is for single use. Furthermore, page 4, lines 4 – 7, state that the toothpaste should be sufficient for a single use or a small number of uses (emphasis added). Page 7, lines 6 – 8 also state that multiple uses may be provided in the toothbrush. Therefore it is clear from the description that it is not an essential feature of the invention for the toothbrush to be “for single use”.

Claim 1 has also been amended to include the feature of Claim 2 previously on file such that Claim 1 now recites that the handle has an integral reservoir.

Claim 1 has been further amended to state that the head has a passage as defined in Claim 3 previously on file – changing “single opening” to “an opening” is supported on page 4, lines 29 to page 5, line 2. Furthermore, the feature in Claim 1 of the reservoir having a thin flexible membrane finds basis on page 7 lines 21 – 23 and page 4, lines 27 – page 5 line 2 and page 6, lines 17 – 21.

Basis for dependant claims as follows:

Claim 2 – Claim 3 previously on file.

Claim 3 – page 6, lines 8 – 10 and page 7, line 15. Note the description refers to the recess, but it is clear that the recession follows the shape of the recess.

Claim 4 – page 6, line 17 – 19

Claim 5 – page 6, lines 17 – 21

Claim 6 – page 7, lines 15 – 17

Claim 7 – page 7, lines 17 – 19

Claim 8 – page 6, lines 10 – 12

Claim 9 – Claim 4 previously on file.

Claim 10 – page 6, line 25

Claim 11 – page 6, lines 26 – 27

Claim 12 – Claim 5 previously on file.

Two omnibus claims have been included for the two embodiments.

It is submitted that no matter has been added to application in accordance with s.76(2).

## ***Clarity***

In response to the clarity object the reference to a single use in Claim 1 has been removed, rendering the objection moot.



## *Novelty*

Both GB'22 and US'33 were published before the priority date of the present application so both are valid for novelty and inventive step assessment.

GB'22 discloses a toothbrush with a piston 9 and stopper 10 to push toothpaste in reservoir 4 onto bristles 3 when the knob 8 is turned. However, GB'22 does not disclose that reservoir 4 has a flexible membrane which is accessible from one side of the handle for squeezing toothpaste onto the head as recited in Claim 1.

The walls of the handle in GB'22 are necessarily rigid for the piston mechanism to operate. Therefore, claim 1 is novel over GB'22.

US'33 discloses putting a dispenser 13 on the head of the toothbrush and filling the dispenser with dentifrice. The dentifrice holder bends to squeeze out dentifrice onto the head.

However, the handle is rigid (page 19, line 25) and US'33 does not disclose the handle having an integral reservoir as recited in Claim 1.

Therefore Claim 1 is novel over US'33.

## *Inventive Step*

Starting from GB'22 Claim 1 is novel in that the reservoir has a thin flexible membrane accessible from one side of the handle for squeezing toothpaste onto the head. The inventive concept of the feature is that the user can easily squeeze toothpaste out of the reservoir onto the head. The toothbrush is easy to manufacture at low cost which is important for disposable toothbrushes since they may only be used once or a small number of times.

GB'22 uses a more complicated mechanism of a piston and stopper which move when the knob 8 is turned. This requires many more parts than the toothbrush of the present invention and the parts must be made to a higher level of precision to co-operate and function correctly. Therefore the GB'22 toothbrushes are more expensive and complicated to manufacture than the present invention toothbrushes. This is evidenced by the last paragraph of GB'22 which acknowledges that for the toothbrush to be economical multiple doses of toothpaste are included. It is therefore apparent that the toothbrush of GB'22 is expensive to manufacture compared to the toothbrush of the present invention and that this is an important consideration for disposable toothbrushes.

In GB'22 the reservoir 4 must have rigid walls for the piston mechanism to function correctly. If the reservoir had a thin flexible membrane for a wall, the piston mechanism would not work correctly.

It is therefore important in GB'22 that the walls of reservoir 4 are rigid and Claim 1 is inventive over GB'22 alone.

Although US'33 does show a flexible dispenser 13, and both documents are in the field of disposable toothbrushes so the skilled person may combine their teachings, the dispenser 13 is provided on the head of a toothbrush. Both US'33 and GB'22 have rigid handles and neither document discloses the combined features of having a reservoir of toothpaste in the handle with a flexible membrane allowing a user to squeeze toothpaste out of the handle and onto the head. By having the reservoir in the handle rather than on the head, such as in dispenser 13, more toothpaste can be stored in the reservoir, allowing more uses of the toothbrush and the user has control over how much toothpaste to dispense. The only prior art toothbrush allowing the user to control the amount of toothpaste used is GB'22 and that document necessarily has rigid walls in the reservoir.

So it is not obvious to the skilled person from GB'22 or US'33 to provide a reservoir in the handle with a flexible membrane allowing a user to control how much toothpaste is dispensed.

Therefore Claim 1 is inventive over US'33 and GB'22 in combination or otherwise.

The dependent claims are novel and inventive due to being dependent upon Claim 1.

This application is therefore in order for allowance. We look forward to receiving the 18(4) communication shortly.

In the event that you are to allow the application, I request that you provide us with sufficient warning for the client to consider filing divisional applications from this application.

The Client also requests accelerated examination on the grounds that an infringing product is about to be launched by competitor.

Yours faithfully,

### **Client Memo**

- Claim 1 previously on file was not novel
  - GB'22 shows a toothbrush with a handle 1 and head 2. The knob 8 may be considered "finger grip". The toothbrush has reservoir 4 in the handle which can push out toothpaste onto the head as the knob is turned. Therefore, shows all features of claim 1 previously on file.
  - US'33 shows a toothbrush with a dispenser 13 which may be considered a reservoir integral to the toothbrush.
- Options for amendment:-
  - The feature of the sealing tab appears to be novel and inventive over the prior art
  - The flexible membrane allowing the user to squeeze out toothpaste for the handle appears to be novel and inventive.
  - The longitudinal ribs are not disclosed in GB'22 or US'33.

Since a toothbrush similar to yours but without the tab is to be launched soon I have chosen to amend the claims to the flexible membrane feature as shown attached. This should cover the infringing product. I have requested accelerated examination so this application may grant quickly for us to enforce it against the infringer – can't enforce before granted.

I decided to include the feature of the passage in fluid communication with the reservoir in Claim 1 since it would be necessary for a toothbrush to have such a passage to get the toothpaste from the reservoir to the head, so without this feature in the claim the examiner may object that the claim does not have all the essential features of the invention. By including this feature in Claim 1 the application is more likely to pass to grant without further amendment so we can enforce it sooner.

The other two distinguishing features could form basis for the divisional applications with claims as shown attached. We can file divisional applications at any point up to the grant of the present application. Please let me know if you would like to file either of the two divisionals.

The first divisional, to the seals, seems to have strong novelty and inventive step arguments so should pass to grant fairly easily.

The second divisional, to the longitudinal ribs, seem to have a less strong inventive step argument so please consider whether this feature would be important to you commercially before we incur the costs of this divisional and the subsequent prosecution costs, which may not be successful in obtaining a granted patent.

- Write to competitor to inform of patent – no innocent infringer rights.
- Try to be able to get interim injunction – balance of convenience in client's favour as competitor not yet launched product.
- No support for remaining finger grip from Claim 1.

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## 2009 PAPER P4

### SAMPLE SCRIPT C

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#### **Amended Claim Set**

1. Disposable toothbrush comprising an elongate handle having a finger grip at one end and a bristle-carrying head adjacent the other end of the handle, a plurality of bristles extending transversely to the handle on a top side of the toothbrush, in which the elongate handle has a recess formed therein forming a reservoir, wherein the reservoir has an exposed thin flexible membrane, and the reservoir is adapted to receive a predetermined volume of toothpaste sufficient for at least a single application of toothpaste to the bristles, wherein toothpaste may be extruded from the reservoir to the bristles by applying pressure to the exposed thin flexible membrane.
2. Original Claim 3, but dependent on amended Claim 1.
3. Original Claim 4, but dependent on amended Claim 2 only.
4. A disposable toothbrush according to any preceding claim, in which the finger grip has transversely extending ribs and the handle has longitudinally extending ribs on a side of the handle opposite from the exposed thin flexible membrane, whereby the finger grip at one end of the handle may be held by one hand of the user to use the toothbrush and the toothpaste may be extruded from the reservoir to the bristles by gliding the other hand of the user, guided by the longitudinally extending ribs, along the exposed thin flexible member from the finger grip toward the head, extruding toothpaste into the bristles.
5. X (A disposable toothbrush according to) X any preceding claim, wherein the thin flexible membrane extends to form a capsule that seals the reservoir.
6. X – X Claim 5, wherein the capsule is retained in the recess by a pair of oppositely disposed lips formed in the handle and extending along the length of the recess.
7. X – X any preceding claim, wherein the exposed thin flexible member is located at the top side of the toothbrush.
8. X – X any preceding claim, wherein the toothbrush comprises a head portion which is separable from a handle portion and includes securing means for securing the head to the handle.
9. X – X any preceding claim, wherein, after an application of toothpaste to the bristles, the flexible membrane is configured to remain in a collapsed configuration and not resume its original shape.
10. X – X any preceding claim, wherein the toothbrush is for single use.
11. A housing for encasing the toothbrush of any preceding claim.

12. A disposable toothbrush substantially as hereinbefore described with reference to the accompanying drawings.

### **Letter to UK IPO**

I enclose herewith a set of amended claims that addresses the objections raised.

#### ***Amendments and Basis***

The phrase “for single use” has been deleted from Claim 1, since as the examiner points out, the invention as described is not limited to single use only.

The phrase “from a base for the bristles defined by the head” has also been deleted from Claim 1 as this language was unclear and did not alter the scope of the claim.

Claim 1 now includes the passage “in which the elongate handle ... thin flexible membrane.” Basis for this is found on page 8, lines 13 – 14 which acknowledges that both embodiments have a thin flexible membrane. It is clear from both embodiments that this is the exposed surface of the reservoir (p4, lines 26 – 29; page 6, lines 8 – 12; page 7, lines 15 – 17). It is also clear from these passages that the recess is formed in the handle.

Also, in Claim 1, the “bristle region” has been amended to read “bristles” to maintain consistency in the claim.

#### **Other claims**

<b>Claim</b>	<b>Basis</b>
2	Original Claim 3
3	Original Claim 4
4	Original Claim 5 (but amended in line with amended Claim 1)
5	Page 7, lines 15 – 17, Figures 5 and 7
6	Page 7, lines 17 – 19, Figure 7
7	All Figures.
8	Page 8, lines 22 – 26
9	Page 8, lines 12 – 15
10	Original Claim 1
11	Page 8, lines 28 – 30
12	Omnibus – based on entire spec.

### *Novelty*

Claim 1 now recites that the “elongate handle has a ... flexible membrane.”

The toothbrush at GB’2 does comprise a reservoir within the handle, however, even if this could be described as being formed by a recess in the handle, it does not have an exposed thin flexible membrane and does therefore not disclose all the features of Claim 1, as amended. Claim 1 and all remaining claims, which are dependent on Claim 1, are therefore novel over GB’2

Even if the sides of the reservoir of GB’2 could be considered thin and flexible and be a membrane, toothpaste cannot be extruded by applying pressure thereto.

The document US’3 describes a toothbrush having a ‘reservoir’ that does have a flexible, exposed membrane. However this reservoir (the holder and dispenser 13) is not formed by a recess formed in the handle. The holder and dispenser 13 is positioned to “project” from the handle (page 20 line 17). Therefore Claim 1, as amended is novel over US’3 and so too are all dependent claims by virtue of their dependency.

### *Inventive Step*

The present invention as described by amended Claim 1 has a reservoir in the handle with an exposed thin flexible membrane. The flexible membrane allows the user to extrude toothpaste to the bristles, by applying pressure to the thin flexible membrane.

GB’2 does not have a thin flexible membrane and relies on a piston mechanism to extrude toothpaste. It is acknowledged that it may be possible to interpret the sides of the GB’2 reservoir as a thin flexible membrane, however it is not suggested that this could be depressed to extrude toothpaste.

The GB’2 acknowledges problems with getting the last bits of toothpaste out of a conventional tube and solves the problem with the piston mechanism. A flexible membrane mechanism would therefore not be desired in the GB’2 device.

The US’3 device is concerned with providing an automatic supply of dentifrice “during a brushing operation”. This is incompatible with the object of GB’2. Even if the dispenser of US’3 was combined with the GB’2 device, the result would be a flexible reservoir with a piston which is not practical or desirable and probably wouldn’t work.

The US’3 document describes a flexible reservoir on the handle that flexes during a brushing operation to dispense toothpaste. It is not concerned with dispensing toothpaste prior to the brushing. It does not suggest that the ‘reservoir’ could be in the handle requiring an exposed membrane because this would not dispense automatically as desired.

Similarly, the skilled person would not be motivated to consider moving the reservoir (13) of US’3 to the location of GB’2 because this would not provide automatic dispensing means as desired. Further, the resulting device would be a flexible reservoir inside the brush handle not leaving an exposed flexible surface as detailed in Claim 1.

Therefore Claim 1 and all dependent claims are inventive over GB’2, US’3 and any combination of them.

### *Clarity*

‘Single use’ removed from Claim 1 and made subject of Claim 10.

## ***Other***

Accelerated prosecution is hereby requested in light of likely infringement.

A Hearing is hereby requested if the application is refused without a further opportunity for written response.

## **Memo**

Claims required amending because examiner was correct in his finding that Claim 1 was not novel over GB'2 as it disclosed a toothbrush with an integral reservoir.

I also believed that the reservoir 13 of US'3 could be considered to be 'integral' with the toothbrush so clarified in Claim 1 that the reservoir is formed in a recess in the handle. This does not limit your protection unduly as it is necessary for your invention. A reservoir entirely above and on the handle would be anticipated by US'3.

Claim 1 was amended to specify that the reservoir has an exposed thin flexible member that is used (by applying pressure) to extrude toothpaste.

This provides broad protection for your invention and this feature is not disclosed or suggested in the cited prior art documents.

Claim 1 is not limited to single use anymore as this was an unnecessary limitation. Specific protection for single use is provided by new Claim 9. Claim 1 covers both of your embodiments since even the capsule has an exposed thin flexible membrane.

New dependent claims have been added relating to specific features described in the spec but not previously claimed. These claims provide you with more specific forms of protection and provide fall back positions if the validity of Claim 1 is attacked.

Claim 1 specifies how toothpaste is extruded, but this is not limiting to the scope unduly as this is the only way your invention works.

Claim 1 covers the features necessary for the user to squeeze it like a conventional tube of toothpaste.

There would be the possibility of filing a divisional before grant for the 'housing' but I think this would lack novelty in light of the disclosure of page 3, lines 14 – 16.

- Therefore not recommended
- Covered in dependent claims in combo with you claimed toothbrush.

## ***Infringement***

Claim 1 not limited to tabs so will cover infringer's use.

Do not take any action before grant so no third party observations are made. When granted sent copy of granted spec to infringer (for damages purposes). Could get a preliminary Injunction as his product has not been launched.

Protection for the tab is still provided in the dependent claims.

\* \* \* \* \*