

2005 PAPER P4
SAMPLE SCRIPT A

This script has been supplied by the JEB as an example of an answer which achieved a pass in the relevant paper. It is not to be taken as a "model answer", nor is there any indication of the mark awarded to the answer. The script is a transcript of the handwritten answer provided by the candidate, with no alterations, other than in the formatting, such as the emboldening of headings and italicism of case references, to improve readability.

CLAIMS

1. A method of manufacturing a brush seal element comprising the steps of:
 - positioning a plurality of holding tubes packed with bundles of bristles on a carrier member such that the ends of the bristles project from the carrier member;
 - clamping the bristles projecting from the carrier member between a pair of co-axial clamping rings located on a brush seal assembly jig;
 - severing the bristles part-way between the holding tubes and the clamping rings;
and
 - integrally joining the clamping rings and the bristles.
2. A method as claimed in claim 1 wherein the holding tubes are disposed around the carrier for positioning the bundles around the circumference of the clamping rings before clamping.
3. [As original claim 3 – but guides has been amended to ‘holding tubes’]
4. [As original claim 4 – but guides amended to holding tubes]
5. A method as claimed in any of claims 1 to 3 wherein the holding tubes are positioned at an angle with respect to the true radius of the carrier such that bristles are all similarly angled with respect to the radial direction of the clamping rings.
6. A method as claimed in claim 5 wherein the holding tubes are arranged obliquely on the carrier.
7. A method as claimed in claim 5 or claim 6 wherein the holding tubes are arranged on the carrier by a positioning arm having a reference abutment face.
8. [As original claim 5]
9. [As original claim 6 except amend ‘free ends’ to read ‘severed ends’]
10. [As original claim 7 but dependent upon claim 9]

11. A brush seal obtainable by a method as claimed in any preceding claim.
12. A method substantially as hereinbefore described with reference to the accompanying figures.
13. A brush seal substantially as hereinbefore described with reference to accompanying Figure 4.
14. A holding tube substantially as hereinbefore described with reference to accompanying Figure 2.

DIVISIONAL CLAIM

A method of manufacturing a brush seal element comprising the steps of:

positioning a plurality of bundles of bristles on a carrier member at an angle with respect to the true radius of the carrier such that the ends of the bristles project from the carrier member;

clamping the bristles projecting from the carrier member between a pair of co-axial clamping rings located on a brush seal assembly jig;

severing the bristles part-way between the carrier member and the clamping rings;
and

integrally joining the clamping rings and the bristles.

LETTER TO PATENT OFFICE

UK Patent Office

Dear Sirs,

Re: GB Application 03251189 Sweeping Seals Ltd

With reference to the outstanding examination report on the above application we hereby request a two month extension to the response deadline and we enclose the following response:

1. Claim Amendments

We herewith enclose amended claims 1 – 14 (in duplicate) to replace previous claims 1 -7.

2. Support for Amendments

Claim 1 has been amended to specify that holding tubes packed with bundles of bristles are positioned on the carrier member. Basis for this may be found on page 4, lines 10 – 11.

Claim 1 has also been amended to include the severing step on page 5, lines 12 -14.

Claim 1 has also been amended to remove the requirement for the seal to be annular and radially extended. This amendment does not add matter because the specification clearly teaches that other shaped seals and angles of bristles are envisaged (see page 7, lines 21 -25 and page 6, lines 15 – 20, respectively).

Claims 2 - 4 have been amended to specify that the guides are holding tubes.

Claim 5 had been added to specify that the holding tubes are angled. Basis for this may be found on page 6, lines 16 – 20.

Claim 6 – page 7, lines 8 -9

Claim 7 – page 7, lines 13 -17

Claim 8 – original claim 5

Claim 9 – original claim 6 but amended to specify that the free ends are severed ends to enhance clarity and provide antecedent basis from claim 1.

Claim 10 – original claim 7

Claim 11 – Brush seal obtainable by claim added basis for which may be found on page 1, line 8.

Claims 12 -14 – omnibus claims added which inherently have support in the specific description.

3. Clarity

In view of the above mentioned claim amendments, Examiners clarity objections are now overcome.

4. Novelty

Claim 1

4.1 Novelty over GB 2436939 (D1)

Claim 1 is novel over D1 by virtue of the presence of bristles packed into holding tubes. D1 discloses the lacing together by copper wire 7 of bundles of bristles 6 which are pulled into holes 3 on a backing ring 1.

The holes 3 in D1 are recesses in the backing ring 1 and are therefore not tubes positioned on a carrier member as required by claim 1. Therefore, claim 1 is novel over D1.

4.2 Novelty over EP 1139202 (D2)

Claim 1 is novel over D2 by virtue of the presence of bristles packed into holding tubes. D2 discloses bristle members 16 being dispensed by a bristle element dispenser 38 to each groove 26 on the aligning member 12. (see Figures 2 + 4 of D2)

The grooves 26 in D2 are not tubes positioned on a carrier member as required by claim 1. Therefore claim 1 is novel over D2.

Claims 2 -11 are novel by virtue of being dependent upon novel claim 1.

Claims 12 – 14 are novel by virtue of the Figures each containing the novel holding tube feature of claim 1.

5. Inventive Step

Claim 1

D1 was filed before but published after the filing date of the present application and therefore constitutes prior art only under s2 (3). D1 is therefore not available for the assessment of inventive step.

5.1 Inventive Step over D2

The underlying inventive concept of the present application is the provision of bundles of bristles packed into holding tubes.

D2 differs from the present application by virtue of arranging the bristle members 16 into grooves 26 on an aligning member 12.

The disadvantage with the arrangement of bristles shown in D2 is that the bristles are simply delivered by a dispenser and result in ‘loosely’ arranged bristle elements 16 (see page 3, line 18 of D2). These loosely arranged bristles are extremely difficult to handle and because the bristles are loose, the inventor of the present invention found that the resultant seals lacked uniformity and suffered from leakage problems.

By contrast, the holding tubes of the present invention enable multiple bundles of packed bristles to be conveniently prepared and handled as described in page 4, lines 17 -21 of the present specification. This results in a seal having uniform and tightly packed bristles which surprisingly has been found by the present inventor to result in a seal with excellent sealing characteristics due to the good bristle packing.

The skilled person would not have been motivated to modify the method of D2 to arrive at the present invention because the problem of loose packed bristles was not evident from the teaching of D2. Therefore, claim 1 is inventive over D2.

Claims 2 -11 are inventive by virtue of depending upon inventive claim 1.

Claims 12 – 14 are inventive by virtue of the figures containing the inventive holding tube feature of claim 1.

6. Other Matters

We now submit that the present application meets all requirements.

We have become aware of a potentially infringing method and brush seals on the market and therefore request accelerated prosecution of the present application. However, the Applicant may wish to file one or more divisional applications and therefore we kindly request that the Examiner contacts the undersigned before granting the present application.

Yours Faithfully,

W. Mitchell

MEMO

Old Claim 1 lacks novelty over both D1 and D2 as both documents made brush seals by positioning bristles on a carrier member and clamping between coaxial rings before joining the rings to the bristles (by welding brazing etc as in claim5).

D1 and D2 also disclosed guides for the bundles (holes 3 in D1 and grooves 26 in D2) as required by claim 2.

D1 and D2 also disclosed radial arrangement of bristles (see p.3, lines 10-12 of D2 and p.3, lines 8-10 of D1) as required by claim 4. D1 and D2 both disclosed machining (and grinding would be obvious) as required by claims 6 + 7 and so amendment clearly required – and as Examiner stated, no sub-claim could be used to impart novelty or inventive step.

Two main options for amendments:

- 1) Holding tubes – packed with bristles
- 2) Angled bristles

Both novel over D1 and D2 because D1 pulls bristles into holes on carrier and does not use holding tubes on carrier. D2 uses guide/grooves on carrier rather than packed bristles in tubes. Furthermore, the angled feature not disclosed because D1 and D2 refer to radial only.

Both have inventive step (D1 not available for this as published after filing date of your application), based on packing providing excellent sealing characteristics and angling providing good lifetime.

Both are clearly commercially important as competitor is copying process – ie using holding tubes and you have indicated your seals are angled – so I have proposed to limit the application to the holding tube for 3 reasons –

- (1) You have listed sealing characteristics from good packing (provided by the holding tubes) as your main selling point. Thus this must be a crucial selling point.

- (2) Furthermore, it is indicated in the application that non-angled bristles have advantages also because they do not overheat in use. Therefore, limiting to holding tubes will still provide protection for angled + non-angled bristles – and so harder to escape infringement as not packed intubes clearly excellent seal but angled + non-angled both good.
- (3) You have indicated on paragraph 3 of your letter that you pre-assemble tube bundle assemblies – ie all are identical so this is key.

I therefore propose to file the enclosed claim as a divisional application.

I have added a claim to brush seals obtainable by the method to provide a greater level of protection with respect to infringement by Generic.

I have also added a product claim to the holding tube which will provide protection against separate sale of the pre-assembled tubes and you will not have to rely on contributory infringement under s60(2) if a third party sells these separately.

Clarity objections were overcome by simply adding a severing step to claim 1 and removing the annular + radial features. This both overcomes the clarity objection and as there is basis for this amendment it provides stronger protection than previous claim 1 which was limited to radially and did not cover angled (claim 4 is also now not redundant in view of this deletion).

2005 PAPER P4
SAMPLE SCRIPT B

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CLAIMS

1. A method of manufacturing a brush seal element comprising the steps of:

positioning a plurality of holding tubes packed with multiple bristles [bundles of bristles] on a carrier member such that the ends of the bristles project from the carrier member;

clamping the bristles projecting from the carrier member between a pair of plates [coaxial clamping rings] located on a brush seal assembly jig; [and]

integrally joining the plates [clamping rings] and the bristles, and

severing the bristles at a predetermined distance between the holding tubes and the plates, to produce a brush seal element.

[such that the resulting seal element is annular and has radially extending bristles].

(Note to Examiner: new text underlined, deleted text in []).
2. The method of claim 1, wherein the plates are annular plates.
3. The method of claim 2, wherein the holding tubes are positioned such that the bristles extend in the radial direction of the carrier and annular plates.
4. The method of claim 2, wherein the holding tubes are positioned such that the bristles are at a pre-determined angle with respect to the radial direction of the annular plates
5. The method of claim 3, wherein the bristles extend radially outwardly from the plates.
6. The method of claim 3, wherein the bristles extend radially inwardly from the plates.
7. The method of any of the preceding claims, wherein the holding tubes are located in respective guides disposed around the carrier for positioning the holding tubes.
8. [As old claim 3, now dependent on new claim 7].
9. The method according to any of the preceding claims, wherein the bristles and plates are metallic and are integrally joined by welding or brazing.
10. [As old claim 6].

11. [As old claim 7, now dependent on new claim 10].
12. The method according to any of the preceding claims, wherein the holding tubes contain a pre-determined number of bristles.
13. A method substantially as described herein, with reference to Figures 1-5.

+ claim to "positioning arm" step, if I had time! page 7, lines 13-15.

DIVISIONAL CLAIM

1. A method of manufacturing a brush seal element comprising the steps of:

positioning a plurality of bundles of bristles on a carrier member such that the ends of the bristles project from the carrier member;

clamping the bristles projecting from the carrier member between a pair of annular plates [coaxial claiming rings] located on a brush seal assembly jig; [and]

integrally joining the plates [clamping rings] and the bristles, and

severing the bristles at a pre-determined distance between the holding tubes and the plates,
to produce a brush seal element,

[such that the resulting seal element is annular and has radially extending bristles]

wherein the bundles of bristles are positioned on the carrier member such that the bristles are at a predetermined angle with respect to the radial direction of the annular plates.

PATENT OFFICE LETTER

The Comptroller
The Patent Office
Cardiff Road
Newport
FAO: Darren Scrapper

02/11/05

Dear Sir,

Re: UK Patent App "No: 0325118.9 Sweeping Seals Limited.

We hereby request an extension of two months under s.117B PA77 to the period set for responding to your letter.

We enclose in duplicate an amended set of claims to replace the claims presently on file.

Amendments

Claim 1 has been amended to specify that the previous "bundles of bristles" are holding tubes packed with multiple bristles. Basis for this amendment may be found on page 4, lines 10-11 (note, the reference to "wire" has been deleted - it is clear from page 1, lines 13-16 and the use of "particularly" at page 1, line 24 that the bristles need not be made of wire). Claim 1 has also been amended to replace "coaxial clamping rings" with the broader "plates", as used at page 5, line 5. It is clear from page 7, lines 21-25 that shapes other than "annular" are envisaged for the claimed seals. Thus, this broadening amendment finds basis in the application as filed.

In accordance with the Examiner's objection at section (4), a cutting step has been added to claim 1. Basis may be found at page 5, lines 12-14 and page 5, lines 17-18. This also addresses the Examiner's objection regarding claim 6.

As claim 1 has been broadened to non-annular seals, the final clause has been deleted, basis for which is explained above.

The Examiners objection regarding the use of "resulting from" has been addressed by referring to the production of a brush seal element (as recited in the introduction of the claims).

Basis for remaining claims:

Claim 2 - page 5, line 5.

Claim 3 - Old claim 1 and page 6, lines 4-6.

Claim 4 - Page 6, lines 16-20.

Claim 5 - Page 7, lines 21-22.

Claim 6 - Implicit in old claim 1 and page 7, lines 21-22.

Claim 7 - Old claim 2

Claim 8 - Old claim 3] (Note old claim 4 is deleted, addressing comment in section 4. The equivalent subject matter is encompassed in new claim 3.

Claim 9 - Old claim 5

Claim 10 - Old claim 6

Claim 11 - Old claim 7

Claim 12 - Page 4, line 20.

Claim 23 - Omnibus claim - inherent basis in appⁿ as filed.

Novelty

GB2,436,939 ("Henry") discloses a method of making brush seals in which a bundle of metallic bristles (6) are positioned on a carrier (1) and held in place with a copper wire (7). There is no disclosure of the use of holding tubes packed with the bristles. Claim 1, and all dependent claims, are therefore novel over this document.

Similarly, the process in EP 1,139,202 involves the use of a bristle element dispenser (38), which releases loose bristles, and not bristles held in a holding tube.

Claim 1 is therefore novel over this document also.

Inventive step

The applicant notes that “Henry” was published after the 18/12/03 filing date of the present application. It therefore cannot be cited in the assessment of inventive step, being s.2(3) prior art only, by virtue of its earlier filing date of 8/8/03.

Referring to EP1,139,202 (“Williams”), the difference between the present invention and the method disclosed in that document is the use of a holding tube to pack the bristles together before placing on the carrier. The use of such tubes has a clear advantage, as noted at page 4, lines 17-21, in the preparation and handling of the bristles during the manufacture process.

Williams is concerned with the same problem of providing a “better method and means for holding, aligning, and positioning” (page 1, lines 19-22) bristles during the manufacturing process. However, it presents a very different solution, namely the use of an “aligning member” with a plurality of grooves (p2, line 1-2). This is considered adequate to solve the above-noted problem, and there is no suggestion of first packing the bristles (16) into holding tubes. Moreover, the use of a holding tube has a clear advantage over the method of Williams, in that there is no need to handle loose bristles, as dispensed from dispenser 38. Such loose bristles are very difficult to handle in practice.

The present invention is therefore inventive over this document also.

The applicant therefore believes that the present application is in order for grant. Moreover, the applicant has become aware of potentially infringing products on the market, and therefore requests accelerated prosecution of this application. A divisional application is intended, so the examiner is requested to telephone the undersigned attorney before allowing the present application to proceed to grant, in order to provide a short period (say a week) for the applicant to finalise its plans in this regard.

Yours truly,

X.

MEMO

- Don't worry about late instructions - I have requested a 2-mo as-of-right extension so the response was timely filed. There are no official fees associated with this.
- It was necessary to amend the claims as the steps recited in old claim 1 were present in the cited prior art.

- I could identify two main inventive concepts, that could serve as basis for amendment:
 - (i) The use of holding tubes.
 - (ii) The angular disposition of the bristles when making a circular seal.
- It is not possible to have independent claims relating to both of these in a single application (not unified - diff. inventions) ⇒ I had to make a choice.
- Judging by your letter, “Generic” are copying your process ⇒ limiting to “holding tubes” should still cover their activities. Moreover, you do not appear to be making the “angular bristle” seals yet, so I felt this could be pursued in a divisional application, rather than get quick grant in the present application.
- By having 2 app^{ns} - cover diff. aspects of your invention. Generic only have to copy one to infringe.

I felt that the “holding tubes” embodiment has a good chance of proceeding to grant quickly, because it appears novel + inventive over the prior art. In this regard, one of the documents (Henry) was only relevant to novelty, so I did not have to argue inventive step over this document. Even if, the invention in Henry was disclosed (perhaps in the US during the priority year), I still think the “holding tubes” embodiment is inventive.

If claim 1 were to be revoked, perhaps in light of the prior art, I have added various dependent claims (see attached copy of the pending claims) that may be found independently valid, as they relate to features with specific advantages.

With respect to Generic, you will only be able to enforce your patent once it has been granted. For this reason, I requested accelerated prosecution of the application. The examiner should call me if it is ready for grant, and we will have to decide on filing the divisional application then (i.e soon).

Once granted, Generics will be liable for damages if their process infringes the claims as granted. They may also be liable if, the process infringes the claims in the application.

Your letter means that they cannot plead s.62(1) “ignorance”. Not a threat - they are manufacturing.

* * * * *

2005 PAPER P4
SAMPLE SCRIPT C

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1. A method of manufacturing a brush seal element comprising the steps of

 affixing a plurality of brush elements to a carrier member, each brush element comprising a holding tube packed with multiple wire bristles fitted slideably in, and projecting from, the holding tube, each element being positioned on the carrier member such that the end of the bristles project from the carrier member;

 clamping the bristles projecting from the carrier member between a pair of clamping plates located on a brush seal assembly jig, and

 integrally joining the clamping plates and the bristles.
2. A method according to claim 1 wherein the holding tubes are bonded to the carrier.
3. A method according to any one of claims 1-2 wherein the seal manufactured is an annular seal and the clamping plates are coaxial clamping rings.
4. A method according to claim 3 further comprising the step of sliding the bristles radially through their holding tubes so that their ends all abut a cylindrical reference face of the assembly jig.
5. A method according to claim 3 or claim 4 wherein the bristles project inwardly from the annular clamping rings.
6. A method according to claim 3 or claim 4 wherein the bristles project outwardly from the annular clamping rings.
7. A method according to any one of claims 3-6 wherein the bristles lie on a true radius of the annular clamping rings.
8. A method according to any one of claims 3-6 wherein the bristles lie at an angle to the radius of the annular clamping ring.
9. A method according to any one of claims 1-8 wherein the bristles and clamping rings are metallic and are integrally joined by welding or brazing.

10. A method according to any one of claims 1-9 further comprising the step of severing the bristles part way between the carrier member and the clamping plates.
11. A method according to claim 10 further comprising the step of machining the free ends of the bristles projecting from the clamping plates to obtain a finished size.
12. A method according to claim 11 wherein the machining is performed by means of a grinding machine.
13. A method of manufacturing a brush seal as described herein before and with reference to the drawings.

DIVISIONAL

A method of manufacturing an annular brush seal element comprising the steps of:

positioning a plurality of bundles of bristles on a carrier member such that the ends of the bristles project from the carrier member:

clamping the bristles projecting from the carrier member between a pair of coaxial clamping rings located on a brush seal assembly jig, such that the bristles extend at an angle to the true radius of the clamping rings, and

integrally joining the clamping rings and the bristles.

[+ an independent claim to a seal with the bristles not aligned to the radius]

* * * * *

DIVISIONAL #2

A method of forming a brush element for use in a brush seal, comprising the steps of:-

passing a multi-stranded wire through a section of tube, the wire being a slideable fit in the tube, and

cutting the wire to a predetermined length such that the wire protrudes from the tube.

* * * * *

LETTER TO PATENT OFFICE

In response to the examination report, I file herewith an amended set of claims.

Basis

Claim 1 has been amended to require that brush elements, having holding tubes and bristles are affixed to the carrier member (see lines 10-13 and lines 23-25 of page 8). Claim 1 has also been amended to remove the requirement of an annular seal and ring clamping members. It is made clear at lines 22-25 of page 11 that seal shapes other than annular seals can be constructed by the method of claim 1.

In response to paragraph (4) of the report the final part of claim 1 (starting at such that ...) has been deleted - it is clear from the first line of the claim what the result of the method is and so the claim is clear. Also in response to paragraph (4), the machining of the bristles is not a required step in the process as it is made clear at lines 1& 2 of page 12 that the seal may be used without the finishing step.

New claim 2 is directed to the bonding of the tubes to the carrier - see line 25, page 8

New claim 3 specifies an annular seal - see old claim 1.

New claim 4 finds basis in old claim 3

New claims 5 & 6 claim inwardly and outwardly protruding bristles - see lines 21-15, page 11.

New claim 7 - lines 4, 5, page 10

New claim 8 - lines 16-17, page 10

New claim 9 - old claim 5

New claim 10 - line 13, page 9

New claim 11 + 12 - old claims 6, 7 (but amended to remove the references to angular seal.

New claim 13 is an omnibus claim directed to the method described in the application.

Novelty vs 202

EP'202 does provide a method of manufacturing a brush seal element by clamping bristles protruding from a carrier between a pair of clamping plates (see line 22-25, page 23). However, '202 makes no reference to the use of brush elements having a holding tube and bristles, as required by new claim 1. '202 places loose bristles in a carrier member (see lines 14-20 of page 24) and clamps these. Claim 1 is therefore novel over EP'202.

Claims 2-12 are dependent on claim 1 and are therefore also novel over EP'202.

Claim 13 is an omnibus claim and is novel for the same reasons as claim 1.

Novelty vs GB 939

GB'939 has an earlier priority date than the current application and is therefore relevant for novelty.

GB'939 does disclose a method of manufacturing a brush seal element and the step of clamping bristles between a pair of clamping plates (lines 1-2, page 20). However, GB'939 does not disclose the use of brush elements having holding tubes. In GB'939 the bristles are pulled into holes in a ring, and secured there by a lacing wire (lines 1-2 and 9-10 of page 19). The bristles are therefore not slideably fitted. There is also only one ring member, holding all bristles, whereas claim 1 clearly requires a plurality of brush elements.

Claim 1 is therefore novel over GB'939.

Dependent claims 2-12 are also, therefore novel over GB'939

Claim 13 is also novel for the above reasons.

Inventive Step

GB'939 has an earlier priority date than the current application, but was published after the priority date of the current application. GB'939 is not, therefore, available with regard to inventive step.

Inventive Step vs EP 202

The current invention differs from EP'202 in that it requires the use of brush elements having bristles in a holding tube. In contrast '202 uses a carrier into which loose bristles are placed and then clamped.

The current invention provides a significant advantage by the use of brush elements as there is no need to handle the individual bristles, whereas in EP'202 bristles must be handled and measured into the carrier.

Given the very small size of the bristles the handling is clearly very difficult.

The current invention is therefore advantageous compared to GB'202.

GB'202 makes no mention of the possibility of using brush elements, nor does it mention any problems with handling loose elements.

The current invention has therefore recognised a problem not taught by GB'202 and furthermore proposed a solution that is not mentioned by GB'202. Claim 1 of the current invention is there inventive over GB'202.

Since claim 1 is inventive, dependent claims 2-12 are also therefore inventive.

Claim 13 is inventive for the above reasons.

All claims are submitted as novel and inventive and grant is therefore requested.

The Applicant is aware of an ongoing infringement of the claims herewith submitted and accelerated prosecution is therefore requested. The Applicant has today filed all divisionals that he intends to file.

Yours ...

MEMO

As the claims stood they were not novel over either of the pieces of prior art, as both disclosed using bundles of brushes (loose in a containing section or tied together) and then clamping the bristles together. It was therefore necessary to amend the claims to provide novelty and an inventive step.

AMENDMENT

I amended claim 1 to require the use of brush elements having bristles and a holding tube. Neither of the documents mention or suggest the use of such elements. The use of the elements is key to your production method and will therefore be present in the copied method.

The feature of the bristles being aligned at an angle to the radius of the seal also appears to be novel and inventive and so I have a filed a divisional application to a method of manufacturing such a seal and such a seal itself [both claims would be included in the application but I only drafted the method claim]. I felt this should be a divisional application as the feature could be added to seals made using the technique of the prior art and so it was important to cover those (which would not have been covered if the feature of the brush elements was also included).

I also amended claim 1 to remove the restriction to only annular seals. There is clear basis for such an amendment and there seemed no benefit in retaining the restriction.

I also addressed the clarity objections of the Examiner.

I have submitted an amended set of dependent claims which claim all of the important features of your process.

I have also filed a further divisional directed to the formation of the brush elements as that is an important part of your process that should be protected in its own right. A new search is likely to be needed for this as it does not relate to the matter of old claim 1, new prior art may then be found.

I note that you have written to your competitor. What did you say in that letter? - This is important as it is not permissible to make groundless threats in relation to a patent and threats made before grant are difficult to justify. If you merely notified them of the patent that is fine [explain more about new threats provisions - in particular should be OK as competitor is a manufacturer].

No action can be taken under the patent until it is granted, and I have therefore requested accelerated prosecution and so grant should occur soon (assuming no more objections are made - I do not expect any more).

Once grant occurs you can bring action for infringement of your patent by use of the method, and also by disposal of a direct product of the process. If they have already come to the market it is unlikely that you will be able to obtain an interim injunction [explain] but damages will be claimable and a final injunction may be possible [explain discretionary nature of injunction + difference of final & interim]

Since the product of the process (the angled bristles) appears to be new, the burden of proof may be reversed and it will be Generics task to prove they are not using the process.

Since Generic are aware of the patent damages may be calculated back to the date they were aware of the patent [explain about issues affecting this - eg the amendment between published & granted].

Once the patent is granted you may wish to send them a further copy with the final claims.

As opposed to litigation a better route may be to attempt to negotiate a licence as that would be cheaper for you and would ensure an income without the uncertainties and expense of a trial.

The loss of your staff may give you grounds for action under a breach of confidence, but is also evidence that the process was derived from yours. [but copying isn't, of course, needed].

Yours

* * * * *