

July 17, 2007

## PATENTS ACT 1977

Grey Technology Limited

Requester

---

### PROCEEDINGS

Request under section 74B of the Patents Act 1977  
for a Review of Opinions 15/06, 16/06 and 17/06 issued  
on patent number GB 2392831 B

HEARING OFFICER

Phil Thorpe

---

## DECISION

### Introduction

- 1 This is a review of Opinions 15/06, 16/06 and 17/06 (“the Opinions”) which all issued 24 November 2006.
- 2 The Opinions were requested by Grey Technology Limited and in each case asked whether its patent GB 2392831 B is infringed by an electric sweeper marketed by a certain company. Each request also asked for an opinion as to whether claim 1 of the patent is valid in the light of the disclosures in four patent documents.
- 3 Observations were filed on only one of the requests.
- 4 Each of the opinions concluded that claim 1 of the patent is not valid as it is not novel with respect to the prior art disclosed in DE 19914574. It is that conclusion that is the subject of this review.
- 5 I note that three separate requests for review have been filed, one for each opinion. Since the matter at issue is the same for each opinion, I will deal with them all in this one decision. I would add also that no other party is involved in

these reviews and that notwithstanding that, a hearing was still held by video conference on 17 May 2007 at which the requester was represented by Mr Hamer of Counsel.

## The Patent

- 6 The patent in issue is divided from application GB 0324011.6 and as with many divisional applications contains a description that to a large extent is directed to the invention claimed in the parent application. As Mr Hamer was at pains to point out, the claims in the patent are not “perfectly matched to the body in the way they would generally be in a non divisional case”. He provides me with one example of this and it is not difficult to find a number of other examples.
- 7 The invention relates to a cleaner for cleaning floors, stairs or the like. It has an elongate brush extending across the width of the apparatus which is rotated to sweep up dust or dirt. The specification on pages 1 and 2 identifies a number of drawbacks with existing designs of cleaners. These include: the relative inefficiency of those relying on suction means; the ineffectiveness of brushes that are rotated merely by friction between the brush and the surface being cleaned as the apparatus is propelled forward; and shortcomings with auxiliary brushes that are typically mounted at either side of the main brush to rotate about generally vertical axes.
- 8 The description describes a number of embodiments. The following drawings show aspects of one embodiment:

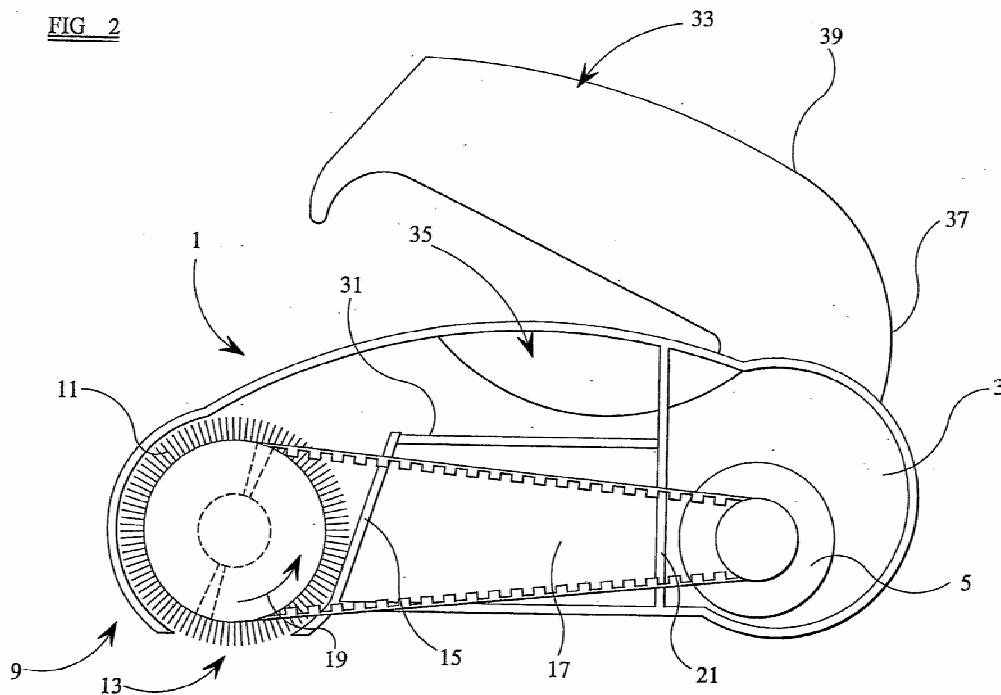
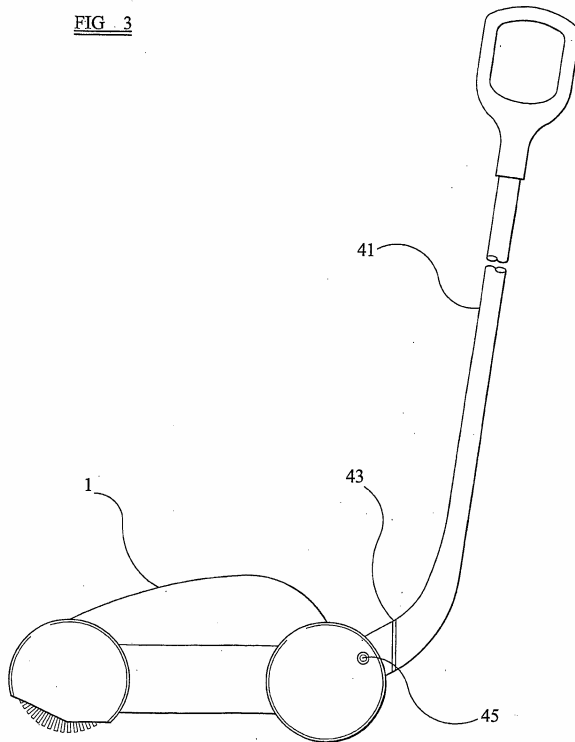


FIG. 3



9 The relevant parts of the cleaner for the purpose of this review are the body, represented by numeral 9 which can be seen to have an opening 13 in its base through which bristles of the elongate rotatable brush 11 protrude. Debris swept up by the brush is collected in compartment 17.

10 As I have noted, much of the description doesn't really concern the issue before me. The relevant parts are the passage bridging pages 8 and 9 which reads:

“As will be apparent particularly from Figure 3, the bristles of the brush arrangement 11 extend outwardly from the aperture in the forward compartment 9. In order to remove stubborn debris and/or to revitalise carpet the lower front region of the forward compartment may be chamfered, or the front region of the forward compartment may be movable (including removable), to increase the exposure of the bristles in this region. In this way, the forward part of the apparatus may be inclined relative to the surface to be cleaned, thereby increasing contact between the bristles and a surface to be cleaned and, on some surfaces, increasing the depth to which the bristles penetrate and clean the surface.”

and that bridging pages 9 and 10 which reads:

“Although not shown, the front part of the forward compartment 9 may be removed to expose the bristles at the front of the apparatus. This effectively increases the aperture in the forward compartment which would seriously impair the effectiveness of a suction cleaner, but in the present invention can effectively be used to assist in the sweeping of stairs, cleaning upholstery and carpets in vehicles and the like operations where a greater exposed area of

bristles can be useful. As an alternative to removing the front part of the compartment 9, the front part may be movable, for example pivotable or slidable, relative to the remainder of the compartment in order to expose the bristles.”

11 I would note that Mr Hamer recognised that the possibility of the lower front region of the forward compartment being chamfered rather than the front region of the forward compartment being movable was not within the scope of the claims and therefore should be discounted.

12 There is one independent claim, claim 1, which reads:

A surface cleaning apparatus comprising: a body; an elongate rotatable brush arrangement extending transversely within the body and having bristles which protrude through an opening provided in a base of the body; a compartment for collecting debris positioned within the body adjacent to the elongate rotatable brush arrangement, the debris-collecting compartment being adapted to receive debris swept up by rotation of the brush arrangement; and a movable front portion provided on the body adjacent to the brush arrangement and adapted to increase exposure of the bristles of the brush arrangement at the front of the body.

13 I turn now to the issue of construing the claim.

### **Construction of claim 1**

14 In its statement of case, the requestor breaks the claim down to the following integers:

A surface cleaning apparatus comprising:

**A** a body;

**B** an elongate rotatable brush arrangement

**B1** extending transversely within the body and

**B2** having bristles which protrude through an opening

**B3** the opening being provided in a base of the body;

**C** a compartment for collecting debris

**C1** positioned within the body

**C2** adjacent to the elongate rotatable brush arrangement

**C3** the debris-collecting compartment being adapted to receive debris swept up by rotation of the brush arrangement;

**D** a movable front portion

**D1** provided on the body

**D2** adjacent to the brush arrangement

**D3** adapted to increase exposure of the bristles of the brush arrangement

**D4** at the front of the body

- 15 I make no judgment whether this is a fair breakdown, nevertheless for convenience I will make use of it.
- 16 The requestor's argument on construction is quite simple. It is that the claim should be construed such that all the features set out above are required to be present at the same time. Hence for example if the moveable front portion is moved to increase exposure of the bristles of the brush arrangement then the compartment for collecting debris must remain adjacent to the brush arrangement. The claim should not be construed such that all that is required is that each of the features must be present but not necessarily at the same time or with the cleaner in the same configuration.
- 17 I turn now to the interpretation of the claim in the opinion. I would note that the opinion sets out in some detail the general principles governing claim construction. Although none of this is contested it is still useful for me to repeat here that the fundamental question is always what would a person skilled in the art have understood the patentee to have used the language of the claim to mean?
- 18 The opinion seeks to answer this question in the following parts of the opinion:

“22. It is clear to me that each of the sweepers disclosed in documents P1 to P4<sup>1</sup> comprises at least the following features of claim 1 of the patent:

*A surface cleaning apparatus comprising: a body; an elongate rotatable brush arrangement extending transversely within the body and having bristles which protrude through an opening provided in a base of the body; and a compartment for collecting debris positioned within the body adjacent to the elongate rotatable brush arrangement, the debris collecting compartment being adapted to receive debris swept up by rotation of the brush arrangement.*

23. It is also noted that the requestor has not argued that documents P1 to P4 do not disclose the features, but rather that claim 1 of the patent is valid due to the feature of the movable front portion. The requestor has argued that by providing a front portion movably mounted on the brush body the bristles of the brush are further exposed at the front of the body. The requestor has also explained, with reference to page 9 lines 2 to 7 of the patent, how this has the effect that the forward part of the sweeper may be inclined relative to the surface to be cleaned, thereby increasing contact between the bristles and the surface. However I am of the opinion that this cannot be construed from claim 1 of the patent, as claim 1 merely requires an increased exposure of the bristles of the brush arrangement at the front of the body.

---

<sup>1</sup> These are the four documents on which opinions regarding validity were requested. DE19914574 was P3.

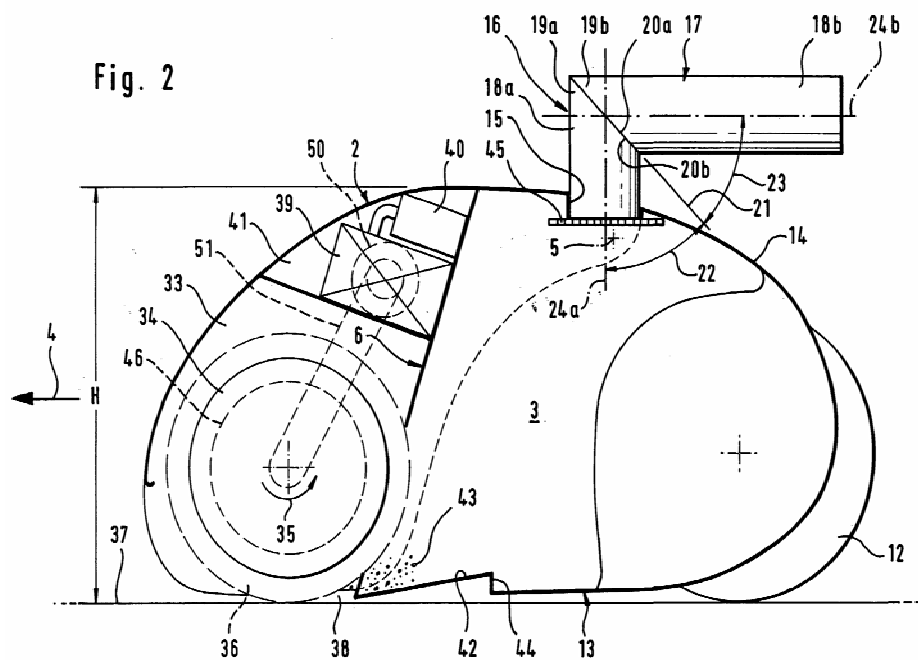
24 Claim 1 could be interpreted as meaning either: the bristles located at the very front of the sweeper are increased in exposure; or that the bristles of the brush which is located at the front of the body are generally increased in exposure. Whichever way claim 1 is interpreted it is my opinion that it is anticipated by the sweeper disclosed in document P3. This document discloses a brush arrangement which is initially exposed through an approximately 90°arc, where said arc increases substantially as a front portion provided on the body is moved.”

19 From these passages it would seem that the opinion examiner adopted a somewhat broader construction than that suggested by the requester. He did not limit the claim such that all the features of the claim must be present at the same time. Nor did he require that the increased exposure of the brushes necessarily enables the cleaner to be inclined relative to the surface being cleaned, therefore increasing the contact between the bristles and the surface being cleaned. Rather in respect of the latter he concluded that the claim covered any increased exposure of the bristles, irrespective of whether or not this was related to enhanced cleaning performance.

20 It is I believe not difficult to see why the opinion examiner came to this construction. The wording of the claim, in particular the lack of any clarification in the claim of the purpose of increasing the exposure of the bristles could be taken as a pointer that the patentee did not intend the claim to be limited in this respect. It is not as if suitable wording was not available to the patentee. The patentee could have simply imported into the claim the wording found in the opening paragraph of page 9 therefore clarifying the purpose of this increased exposure. But he chose not to do so. This is unfortunate since if he had done this then it is unlikely that both the opinions, at least in respect of validity, and this review would have been necessary. I would add that it is also unfortunate that the prior art identified by the requester was not identified during the examination process as this may also have led to the claims being amended. Nevertheless it is the claim as is currently worded that needs to be construed.

21 As I have already said the question is always what would a person skilled in the art have understood the patentee to have used the language of the claim to mean? I will start with the question of whether the skilled person would have understood that by not referring in the claims to the purpose of increasing the exposure of the bristles, the patentee was seeking to extend the scope of the claims beyond the purpose for doing this that is set out in the description. It is easy to think of scenarios in which this might be the case. For instance consider the often cited example of a specification that refers only to a compression spring in its body, yet in the claims refer more broadly to “spring”. This will normally be a clear indication that the patentee did not intend to limit his claims to a particular type of spring. However even here it will still depend on the context in which the words have been used. And it may be that in a particular context the word “spring” as used in the claims does not mean any type of spring. So when construing the claims it is always necessary to look at the context in which the words of the claims were used.





- 25 In the Dupro Cleaner, the dirt collecting container 3 is emptied by rotating the pipe socket 17 which releases the locking bracket 26 from the locking button 25. The front of the housing 2 can then be pivoted upwards about axis 5 to expose the front end of the dirt collecting container 3. There is no suggestion in this document that the front part of the body is moveable for any other reason than to empty the dirt container.
- 26 Referring back to the breakdown of the claim set out above, Mr Hamer accepts that the Dupro cleaner possesses **at all times** essentially all of the features with the notable exception of C2, C3, D3 and D4. In relation to these, he argues that features C2 and C3 are present only when the front part of the housing 2 is locked to the rear part of the housing 3 (ie the Dupro cleaner is in its *in-use configuration* as shown in the figures above). In that configuration he submits that D3 is not present since the front part of the housing is not able to move and therefore cannot increase the exposure of the bristles of the brush arrangement. Mr Hamer does however accept that when the front of the body is released and pivoted upwards to empty the dirt container then feature D3 may be present however in that configuration, which I shall refer to as the *emptying configuration*, features C2 and C3 are no longer present. In other words when the front of the body is pivoted upwards the compartment for collecting dirt is no longer adjacent to the elongate rotatable brush arrangement nor is the compartment able to receive debris swept up by rotation of the brush arrangement.
- 27 I believe that this assessment by Mr Hamer is right. In addition the Dupro cleaner does not allow the exposure of the bristles to be increased in order to enhance the cleaning performance for example by allowing it to be inclined when in use in order to increase contact between the surface being cleaned and the bristles.



28 I would add that at the hearing and in response to some questioning from me, Mr Hamer went to some length to show that the Dupro cleaner could not be used to clean surfaces with the front part of the housing unlocked from the rear part of the housing. The cleaner could only be used with the two parts locked together. I do not need to go into detail. It is necessary only for me to say that I agree with Mr Hamer on this point.

### **Conclusion**

29 I have carefully reviewed the interpretation of claim 1 of the patent in the light of the arguments put forward by the requester and I have found that Opinions 15/06, 16/06 and 17/06 all interpret claim 1 too broadly and that as a result of this each of these opinions wrongly concludes that the patent is invalid in the light of DE 19914574.

30 Thus, I order those parts of Opinion 15/06, 16/06 and 17/06 relating to validity to be set aside.

31 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

**PHIL THORPE**

Deputy Director acting for the Comptroller