

OPINION UNDER SECTION 74A

Patent	GB 2392831
Proprietor(s)	Grey Technology Limited
Exclusive Licensee	
Requester	Marks & Clerk, on 13 September 2007
Observer(s)	
Date Opinion issued	17 March 2008

The request

- 1 The comptroller has been asked to issue an opinion as to whether claim 1 of GB 2392831 (“the patent”) is novel or obvious in light of the following two documents:

Document A1: Japanese patent laid-open number 96126/80 of 22 July 1980 – Matsushita. An English language translation has been supplied by the requestor for this document.

Document A2: Japanese patent JP 2131730 of 21 May 1990 – Matsushita. An English language abstract has been supplied by the requestor for this document.

Observations

2. Observations were received from the patent proprietor, Grey Technology on 30 November 2007.

Observations in reply

3. Observations in reply were filed on 18 December 2007.

Background

4. The patent has already been subject to three earlier opinions¹ and a review²

¹ Opinions 15/06, 16/06 and 17/06

² BL O/200/07

which considered all three earlier opinions in one action. At an early stage both the requester and the patentee were informed that it would not be appropriate for me to reconsider any of the issues that were considered in the review. This is of importance because the request discusses various aspects of the review, particularly the conclusions of claim construction. This is discussed in more detail in paragraphs 11-17 below.

Allowance of the request

- 5 Neither of the documents being relied on by the requestor were considered in the earlier opinions or the review, therefore, they can be considered in this opinion.

The patent

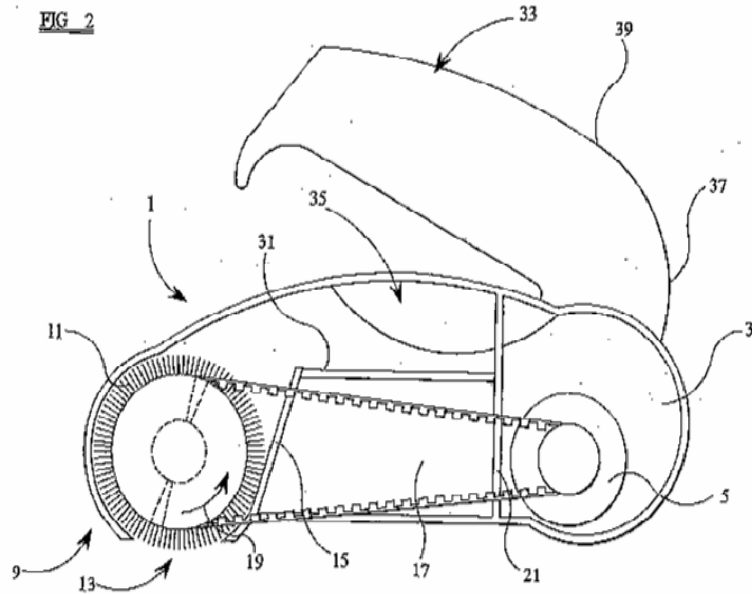
- 6 The patent was granted to Grey Technology Limited on 28 July 2004 based on an application filed on 19 July 2002. The patent claims priority from UK Patent Application No. 0117722 filed on 20 July 2001 and UK Patent Application No. 0127652 filed on 17 November 2001. The patent is currently in force.

- 7 There is one independent claim, and in the statement of case, the requestor breaks it down into the following integers:

A surface cleaning apparatus comprising:

- A. A body;
- B. 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;
- C. 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
- D. a moveable 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.

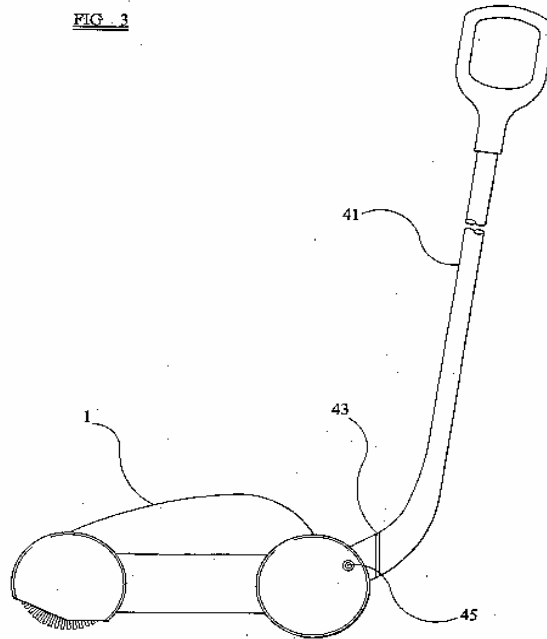
- 8 As the patentee also uses the above breakdown of the claim in its observations, I shall also make use of it.
- 9 The following drawings help to understand the patent. Figure 2 shows a cross section of the cleaning apparatus. A brush arrangement 11, protrudes through an opening 13 in a base of the apparatus. Debris swept up by the brush is collected in a compartment 17.



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According to the description Figure 3 (below) is said to show that "...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"

FIG. 3



Claim construction

- 11 As indicated earlier, the construction of the claim has previously been considered in the review of the original opinions and I will therefore follow the claim construction decided on in that review. Of relevance to the issue here are the hearing officer's comments on the construction of integer D of claim 1 where he stated:

“In particular he (the skilled person) would understand that the patentee did mean to limit his claim to cleaners where increased exposure of the bristles would allow for an enhanced cleaning performance”

and also his comments in relation to whether each integer of the claim need be present at the same time where he stated:

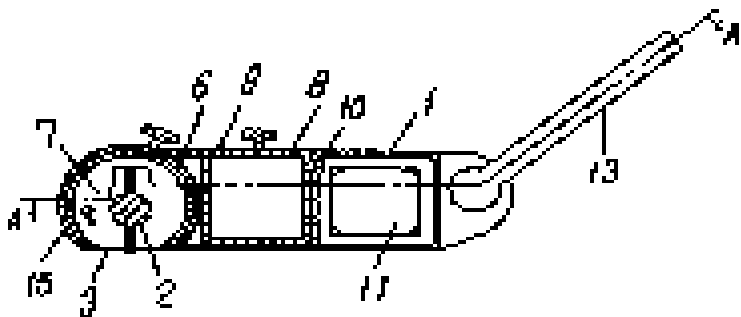
“Such a construction of this part of the claim would lead to an understanding that the claim is, as suggested by Mr Hamer, defining the cleaner in a particular state ie. that the whole claim sets out features in an in-use cleaning configuration.”

- 12 Two aspects of claim construction have however been brought up for the first time in this request. In order to decide the proper construction to put upon these aspects of the claim I shall follow the standard principles of claim construction as set out in *Kirin-Amgen and others v Hoechst Marion Roussel Limited and others* [2005] RPC 9. I must put a purposive construction on the claims; interpret them in the light of the description and drawings as instructed by section 125(1) and take account of the Protocol to Article 69 of the EPC. In simpler language I must decide what a person skilled in the art would have understood the patentee to have used the language of the claim to mean.

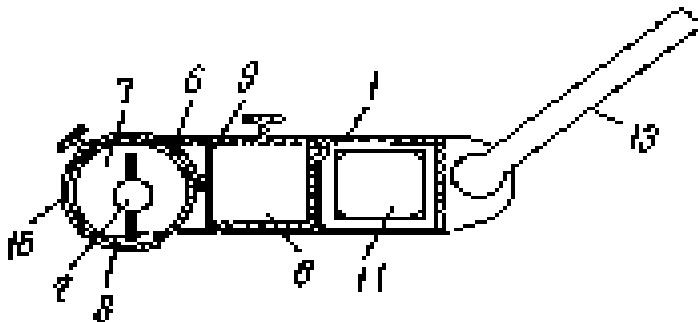
- 13 The first new aspect which the requestor raises is what constitutes the “front of the body”. The requestor argues that this term should be construed broadly so as to cover the general region of the cleaner that is at the opposite end of the cleaner to that to which the handle is attached. More particularly the claim should not be construed as separating the “front” from any features of the body such as the brush receiving opening, the adjacent base, sides or top of the body.
- 14 The proprietor argues that the claim clearly differentiates between an “opening in the base of the body” and “increasing exposure of the bristles of the brush arrangement at the front of the body”. In other words, the opening through which the bristles extend is in the base of the body rather than at the front of the body.
- 15 I am not convinced by the arguments put forward by the requestor. In an in-use configuration, the body clearly has a bottom portion, a top portion, a back portion and a front portion. As the bottom or base portion in integer B already includes an opening through which the brush protrudes I think the part of the body which constitutes “the front of the body” is the leading portion when the cleaner is in use. This is what I believe a skilled person would understand the patentee to be using the wording in the claim to mean. This is a purposive construction of the claim having regard to the description and the drawings. Such a construction is also entirely consistent with the earlier review which held that the increased exposure of the bristles is to allow enhanced cleaning performance.
- 16 The second new aspect of claim construction put forward by the requestor relates to what constitutes “a compartment for collecting debris”. The requester argues that it would be wrong to construe the word “collecting” to mean “accumulating”. The requestor refers in this respect to figure 8 in the patent which shows a cleaning device where the debris collecting compartment is not provided inside the housing rather the cleaner is connected via a hose to a standard vacuum cleaner. The proprietor argues that it is clear that this embodiment is not within the scope of the claims, being instead left over when the patent was divided out from its parent. The proprietor goes on to argue that “the term “debris-collecting compartment” must be construed purposively and functionally to mean a compartment in which debris is collected. I am of the opinion that the person skilled in the art would, when construing this aspect of the claim purposively, understand “collecting” to indeed mean “accumulating” when the document as a whole is considered. In this regard I specifically note the first full paragraph of page 7 and lines 15 and 16 in particular which state “Debris therefore accumulates within the intermediate compartment 17”.
- 17 Having construed to the extent necessary the claim, I can now consider the prior art put forward by the requestor.

Document A1: Japanese patent laid-open number 96126/80

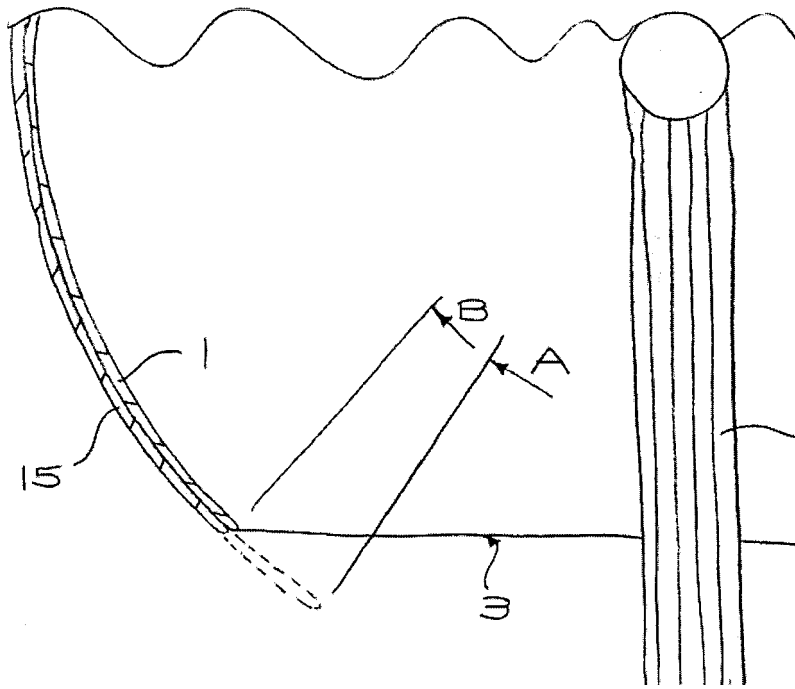
- 18 Document A1 shows an electric sweeper which includes a rotating brush 2. The sweeper has a dust box 8 within the main body for collection and a suction port 3 is present below the brush. A shutter 15 can be moved from a position where it encloses the brush 2, fig 2, to a position where the brush 2 is exposed, fig 3 (the uppermost figure below). The closed position is said to enable the sweeper to be transported without dust dropping out of the body. In the open position the brush is exposed for cleaning the floor.



■ 3 ■



- 19 The requester argues that moving the front portion 15 between the closed position and the open position increases the size of the opening, exposing more of the bristles at the front of the body as it is opened. The requester has produced the figure below in an attempt to more clearly show what it considers to be the relationship between the body 1, brush 2 and front portion 15 for closing aperture 3. According to the requester "Position A shows in dashed outline the leading edge of the front portion 15 extended to partially close aperture 3. Position B illustrates the forward edge of the aperture 3 in the body 1."



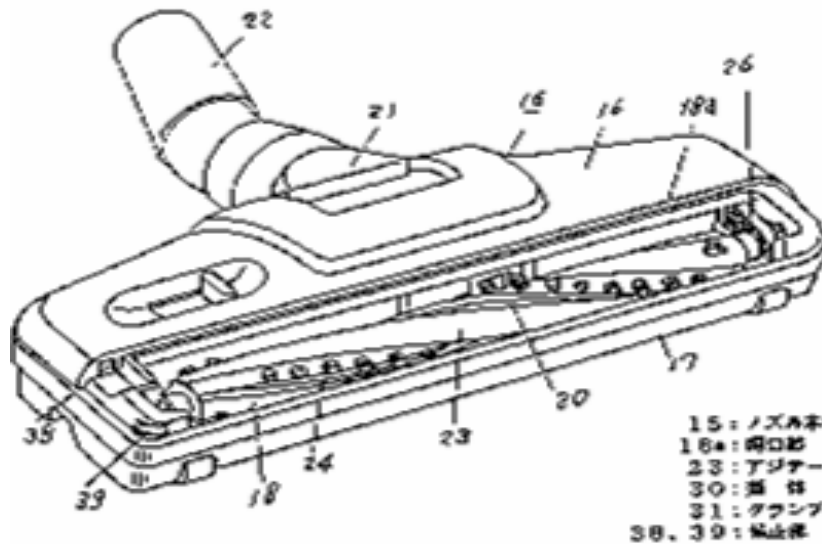
- 20 The request notes “Rotation of the front portion 15 from position A to position B increases the exposure of the bristles of the brush arrangement at the front of the body in exactly the same manner as can be best understood from the patent, by increasing the size of the aperture through which the bristles extend on the forward side of the roller. This provides enhanced cleaning performance, since it allows for the bristles to be pushed more deeply into the pile of a carpet. It notes that even if this increased exposure is in the base of the unit, it is still “at the front of the body” having regard to how a skilled person would construe that phrase. Hence each of the integers A-D are therefore present in A1. The fact that there is no description that the cleaner of A1 is to be used in this manner is irrelevant, since claim 1 is not directed to the use, but rather to apparatus adapted to, or capable of performing the recited functions.”
- 21 The proprietor accepts that integers A-C of the claim are disclosed by document A1 but contends that integer D is missing. In particular it argues that the movable front portion 15 that is adjacent to the brush arrangement is not adapted to increase the exposure of the bristles of the brush “at the front of the body”. Rather the aperture that is revealed when the front portion 15 is moved is in the base of the body.
- 22 I have some sympathy with the argument that cover 15 can be described as being at the front of the body. It is after all positioned forward of the brush assembly. Integer D however requires that movement of the cover increases exposure of the bristles of the brush arrangement at the front of the body.
- 23 Having considered the document carefully, I am not convinced that it teaches this. Rather it seems that there are two configurations for the sweeper in A1. The first configuration is the transport configuration where the cover 15 closes the opening. The second configuration is the in use configuration where the

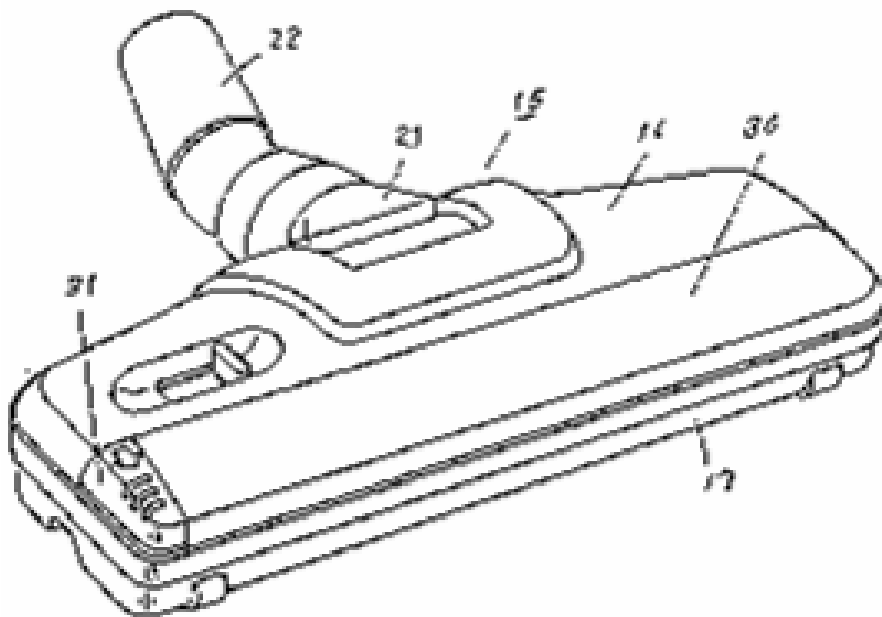
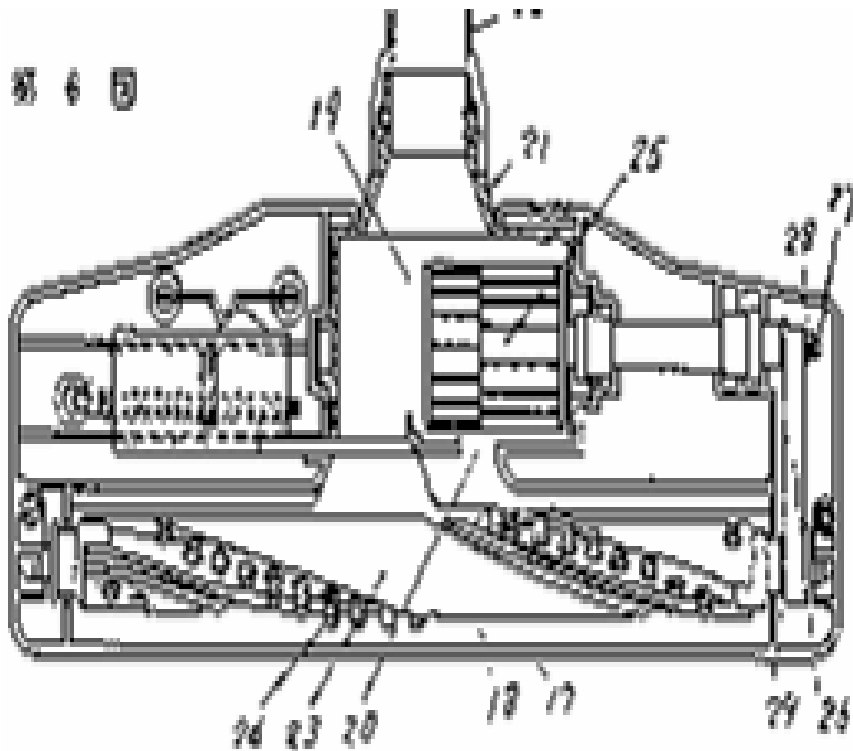
cover is open such that the brush protrudes through an opening in the base of the sweeper. The document therefore seems to show a sweeper having a cover which can be moved such that a brush protrudes through the base of the sweeper, in an in-use cleaning position. There is nothing to suggest that the cover is adapted for use in the manner shown in the requester's figure above ie. with the cover in an intermediate in-use configuration where the cover only partly exposes the brush and where it could be opened further should it be necessary to increase the exposure of the bristles. Nor is there anything to suggest movement of the sort that will increase exposure of the bristles at the front of the body as I have construed that phrase so as to enhance the cleaning performance. The only exposure of the bristles is in the base of the body.

24 I am therefore of the opinion that claim 1 is novel with regard to this document.

Document A2: Japanese patent JP 2131730 of 21 May 1990

25 This document shows a floor nozzle for a vacuum cleaner. The nozzle includes a rotary brush 24 extending transversely within the front of the body of the nozzle and the brush protrudes through opening 18. It would seem debris swept by the brush passes to compartment 19 before being sucked through an outlet by the vacuum. A cover portion 30 is removable, seemingly to facilitate maintenance of the nozzle in the brush region.





26 The requester argues that the document shows all the integers of claim 1. The proprietor accepts that integers A and B of claim 1 are disclosed in the document but disputes that integers C and D are present. I will consider first integer C namely the compartment for collecting debris positioned within the body adjacent to the elongate rotatable brush arrangement and adapted to receive debris swept up by rotation of the brush arrangement. The requester

argues that compartment 19 meets this requirement in that it collects debris swept up by the brush. The proprietor states that the compartment referred to does not actually collect the debris, rather it merely allows for passage of the debris to the outlet. Given the construction I have placed on the claim with regard to the compartment I cannot accept the argument that portion 19 allows for collection of the debris and I therefore agree with the proprietor it merely allows for passage of the debris to the outlet. Hence I am satisfied that document A2 does not disclose integer C.

27 In respect of integer D, the requester argues that removal of front portion 30 increases exposure of the bristles of the brush at the front of the body. It is further argued that when cover 30 is removed, the increased area of bristles exposed could be used to clean upholstery or “when cleaning stairs the tread surface can be cleaned in the conventional manner and the riser surface cleaned by pitching the apparatus forward to engage the newly exposed bristles therewith”. I am not convinced by this argument. It seems from the document the only reason for removing cover 30 is to allow maintenance in the brush region and there is no suggestion, as far as I can tell, that removal of the cover 30 can enhance cleaning performance. Indeed it is difficult to see how debris can be swept up by the cleaner with the cover 30 removed.

28 I am therefore of the opinion that claim 1 is novel with regard to document A2.

Obviousness

29 The requestor has asked for the obviousness of claim 1 to be considered should the claim be found to be novel. The requester states that “the prior art is replete with sweepers having integers A, B, C” and in light of the teaching of A1 and A2 it would be obvious to provide a movable front portion on the body adjacent to the brush arrangement which increases the size of the brush-receiving opening to prevent spillage of waste through the brush-receiving opening (A1) or which opens a separate aperture in the body for improved cleaning of the brush”. In light of the evidence presented to me I have no way of knowing whether the art is replete with sweepers showing integers A, B, C. What I have decided on however is that documents A1 and A2 do not show the features of integer D. This aspect has already been covered earlier in relation to novelty so I am not going to go in to further detail here. I will however reiterate the point that the front cover must be movable to enhance cleaning performance in an in use configuration. Its function is not to prevent spillage of waste or to allow improved cleaning of the brush. For these reasons I cannot see any way in which documents A1 and A2 render claim 1 obvious even if the assertion that integers A, B, C are well known in the art is accepted.

30 A slightly different obvious argument is proposed in the observations in reply and that is even if it is decided that movement of the cover in document A1 to the open position is not considered to enhance cleaning performance then opening the front cover to an even greater extent would to achieve this aim and would be an obvious variation on the teaching of this document. I am not convinced by this argument. It is clear from the documents that the movable

front cover is for one purpose and that is to prevent debris from falling from the machine when it is being transported and that is by means of closing the front cover. There is very little discussion about the front cover in an open position as this just seems to allow a cleaning configuration. There is no discussion whatsoever in this document regarding enhanced cleaning positions and therefore I do not think it would be obvious to vary the extent of the opening of the front cover to achieve an enhanced cleaning position, particular when the whole aim of the documents is to provide a closed transport configuration using the moveable front cover.

- 31 A further argument has been proposed and it that it would be obvious to include the removable front portion taught in document A2 in the apparatus of document A1. Putting aside the fact that the two apparatus are quite different constructions, I have already decided under novelty that the removable front portion of A2 is not to produce an enhanced cleaning position, rather to allow cleaning and maintenance in the brush region. I can therefore see no way in which the cover of A2 can be combined with the apparatus of A1 to allow an enhanced cleaning configuration.
- 32 The requester also mentions in relation to document A2 that it is well known in the art for sweepers to include brushes that are made of hairs or filaments. Again I have no way of knowing if this is correct but given the findings above, this point is of no relevance to the novelty or obviousness of the claim and there is no need for me to come to an opinion on this aspect.

Opinion

- 33 I find claim 1 to be novel and inventive over documents A1 and A2.
- 34 The requester has requested that the comptroller revoke the patent upon a finding of anticipation or obviousness. However I have concluded on the basis of the information before me that claim 1 is novel and involving an inventive step. Even if I had concluded otherwise then this would not result in the patent being revoked as the opinion is a non-binding view of the examiner and revocation of a patent cannot result under this procedure.

Review of the Opinion

- 35 Section 74B and Rule 98 of the Patent Rules 2004 provide that the proprietor or an exclusive licensee of the patent in question can ask for a review of an opinion but only in relation to validity where the opinion wrongly concluded that the patent was invalid, or was invalid to a limited extent. In this case I have reached no such conclusion hence no review is possible.

Lyndon Ellis

Examiner