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## PATENTS ACT 1977

IN THE MATTER OF Patent Application No. 8914084.2 by Nicholas D McKay

## STATEMENT OF REASONS

Following a hearing before me on 12 January 1993 at which the applicant was represented by his patent agent, Mr F A Clifford of Marks & Clerk, and the examiner, Mr P M Weller, was also present, my decision was conveyed to the applicant in an Official Letter dated 20 January, this being the final day of the period allowed under section 20 and rule 34 of the Patents Rules 1990 for putting the application in order for grant. I now give my reasons for that decision.

The principal issues to be decided were first, whether claim 1, as now amended, discloses matter extending beyond that disclosed in the application as filed, and to this extent is in conflict with section 76(2), and secondly, whether claims 1 and 2 involve an inventive step over the disclosure of US Patent No 4,727,616, as required by section 1(1)(b).

This application relates to a device for removing particles, especially fibrous particles such as lint, threads and hairs, from material, such as fabric material. For convenience and without prejudice to the claimed scope of the invention, I shall hereafter refer to the particles to be removed as "fibres" and the material from which they are to be removed as "fabric".

The device comprises a handle on which is mounted a roll of adhesive tape, with the sticky side outward, so that when the device is rolled across a fabric surface, loosely clinging fibres are removed by adhesion to the roll. When the outer surface of the roll is saturated with fibre, it can be removed to expose a fresh tape surface underneath and the tape roll is split across its width to facilitate removal one piece at a time.

Devices of this type are already known and the invention in this case, as presented in the original specification, was the nature of the split, which extends only partly across the width

of the roll, thereby maintaining the longitudinal integrity of the tape, while allowing saturated layers to be removed by tearing a narrow unslit portion.

## Original claim 1 was as follows:

"In a lint remover assembly provided with a handle member having a lint remover roller in association therewith which is adapted to supportably receive a pressure sensitive adhesive tape roll thereon having layers of adhesive tape with the adhesive surface facing outwardly so that the adhesive tape roll can be selectively rolled over a surface to selectively lift lint and/or other foreign particles therefrom, the combination comprising:

a pressure sensitive adhesive tape roll having an outwardly facing adhesive surface adapted for selective mounting upon a lint remover roller, said pressure sensitive adhesive tape roll having at least one slit substantially therethrough, said slit extending only partially across the width of said tape roll so as to define a narrow unslit portion in said tape roll which maintains the retentive longitudinally continuous integrity of said tape roll on the lint remover roller upon which it is mounted, each layer of said tape roll being selectively detachable upon saturation by lifting it away along said slit and tearing it away through said narrow unslit portion to expose the next lowermost unused layer."

A second independent claim, claim 9, was similar in scope to claim 1, but contained the additional requirement that the pressure sensitive adhesive tape be washable plastic based. All other claims were appendant to claim 1 or 9.

Several embodiments of the invention were described and illustrated in the drawings including various slit configurations in which the unslit portion of the tape was in the centre or at one or other edge or there was an unslit portion at each edge and in some cases additional unslit portions between the edge portions. Some of these unslit edge portions coincided with a non-adhesive edge portion of the tape. Thus the embodiment shown in Figure 6 had a tape roll which was adhesive over most of its width, but had a continuous narrow non-adhesive band along one edge with the slit in the tape extending from the inner edge of the non-adhesive band to the opposite edge of the tape. The tape roll shown in Figure 1 had two non-adhesive bands, one along each edge, with the slit extending from the inner edge of one non-adhesive

band to the inner edge of the other. There appeared to be no detailed description of how these non-adhesive regions were formed or constructed and a number of statements in the specification indicated that they were not in themselves novel or inventive. Thus a sentence beginning at page 10, line 7 read:

"The use of one or more non-adhesive side portions is well known in the prior art and is not considered as an integral part of this invention."

and lines 24 to 26 on page 15 included the statement:

"In addition, it is not critical to the invention that a non-adhesive side portion be utilized therewith for such is known in the prior art."

There is, I think, no disagreement that US Patent Specification No. 4,727,616, cited during examination of the present application, prior publishes the present applicant's original claim 1. This specification also shows a device for removing fibres from fabric surfaces comprising an adhesive tape roll mounted on a handle, the roll being slit partly across its width so as to leave a narrow unslit portion which must be torn through as each piece of used tape is removed. Moreover the earlier device also includes a non-adhesive band along one edge, with the slit extending from the inner edge of this band to the opposite edge of the tape roll and in this instance the nature of the non-adhesive region is specified. It consists of part of the adhesive coating, which extends across the full width of the tape, but is masked in the non-adhesive region by a stain or ink. The stain or ink, not only renders the region non-adhesive, but additionally provides it with a colour so that it can be more easily recognised.

During examination of the present application, a number of different forms of claim were submitted, as possibly distinguishing the present device from the earlier disclosure, but none of these was acceptable to the examiner.

The specification in its present form contains two independent claims. Claim 1 is for:

"A lint remover assembly provided with a handle member having a lint remover roller in association therewith which supports a pressure sensitive adhesive tape roll thereon having layers of adhesive tape with the adhesive surface facing outwardly so that the adhesive tape roll can be selectively rolled over a surface to selectively lift lint and/or other foreign particles therefrom, in which assembly:

the pressure sensitive adhesive tape roll is adapted for selective mounting upon the lint remover roller; has at least one slit substantially therethrough; and is provided with one narrow non-adhesive-coated unslit portion longitudinally along one side edge thereof, said slit extending from the inside edge of said non-adhesive unslit portion partially across the width of said tape roll to the opposite side edge of said pressure sensitive adhesive tape roll so that unslit portion maintains the longitudinal continuity of said tape roll on the lint remover roller upon which it is mounted, each layer of said tape roll being selectively detachable upon saturation by lifting it away along said slit and tearing it away through said narrow unslit portion to expose the next lowermost unused layer."

## Claim 2 is for:

"A lint remover assembly provided with a handle member having a lint remover roller in association therewith which supports a pressure sensitive adhesive tape roll thereon having layers of adhesive tape with the adhesive surface facing outwardly so that the adhesive tape roll can be selectively rolled over a surface to selectively lift lint and/or other foreign particles therefrom, in which assembly:

the pressure sensitive adhesive tape roll is adapted for selective mounting upon the lint remover roller; has at least one slit substantially therethrough; and is provided with two narrow non-adhesive unslit side edge portions, one longitudinally along each side edge thereof, said slit extending from the inside edge of one of said narrow non-adhesive side edge portions partially across the width of said tape roll to the inside edge of the opposite non-adhesive unslit side edge portions, so that the unslit portions jointly maintains the longitudinal continuity of said tape roll on the lint remover roller upon which it is mounted, each layer of said tape roll being selectively detachable upon saturation by lifting it away along said slit and tearing it away through said narrow unslit portions to expose the next lowermost unused layer.

In the applicant's submission claim 1 is inventively distinguished from the cited prior art by its limitation to a device in which the non-adhesive portion is "non-adhesive-coated" and claim 2 is rendered novel and inventive by its requirement that there are two non-adhesive

portions present, one along each edge of the tape roll, with the slit extending from the inner edge of one non-adhesive portion to the inner edge of the other.

Because of time pressure, these claims were only submitted to the Office the day before the hearing, and there was no opportunity for them to be examined in detail before consideration by me. My first observation on seeing them, was that the expression "non-adhesive-coated" in claim 1 is ambiguous and could mean either "not coated with adhesive" or "coated with non-adhesive". Mr Clifford did not contest this, but indicated that the former meaning was intended. I will consider the claim further on this basis, but it appears to me that, if it is to proceed, it will have to be amended to make the intended meaning clear.

The examiner's first objection to claim 1 was that limitation of the non-adhesive portion to one which is not coated with adhesive constitutes an addition of subject-matter, as there was no disclosure of the nature of the non-adhesive portion in the original specification. He also considered that the provision of such a non-adhesive portion did not constitute an inventive step over the cited prior art.

It seems appropriate initially to consider these two points together, for it might be thought that, on a purposeful interpretation of the original disclosure, it would have been obvious to the person skilled in the art that a non-adhesive portion bordering an adhesive coating could be most easily provided by simply omitting the coating where no adhesive was needed and, accordingly, that the inclusion of a non-coated, non-adhesive portion in claim 1 would not constitute an addition of subject-matter. This argument was not put by Mr Clifford and I think advisedly so, for if this feature were indeed an obvious extension of the original disclosure, it would not appear capable of providing an inventive distinction.

Mr Clifford made two submissions to me on the question of added subject-matter, the first being that, since the word "adhesive" is a noun as well as an adjective, it can mean a substance for sticking things together, and "non-adhesive" in the present context indicates the absence of any such substance. I have carefully considered this possible interpretation and reviewed the original specification with it in mind, but am unable to accept it. The expression "non-adhesive" seems to be used in all critical parts of the original specification as an adjective describing a portion of the tape surface and to mean the opposite of "adhesive" used

as an adjective, that is to say not sticky. It therefore provides no information on how the lack of adhesion is achieved.

Mr Clifford's second submission was that, as this application is of American origin, the drawings accompanying the original specification were made in accordance with US Patent Office practice and it is clear from the way in which they shade the non-adhesive portions of the tape that these portions are shiny and hence non-coated. I am not conversant with the US Patent Office practice on drawings and Mr Clifford did not refer me to any document on the subject, but my own experience suggests that it is not usually possible to put such a fine interpretation on the drawings of a patent specification. It may well be that the relevant portions of the present tape are to a greater or lesser extent lustrous, but this does not necessarily mean that they are non-coated. For example, I see it as a significant point that coated portions of tape in the cited American specification, which the present wording seeks to exclude, are shaded in the same manner as the allegedly non-coated portions of the present tape. Accordingly, I do not accept either of Mr Clifford's submissions on added subjectmatter. I find that the present specification, in its original form, was silent on the nature of the non-adhesive portions of the tape and, in so far as the amended specification now describes and claims these portions as non-coated, it discloses matter extending beyond that disclosed in the application as originally filed.

Having found claim 1 to be invalid on the ground that it includes added subject-matter, it is not strictly necessary for me to consider whether it contains an inventive step. However, this decision is subject to appeal and my finding on added subject-matter could be reversed. Accordingly, I feel that it would be prudent to consider all objections raised by the examiner and contested by the applicant.

In order for claim 1 to display an inventive step over the cited prior art, it would be necessary for its alleged distinguishing feature, the use of a non-coated, non-adhesive tape edge region, to provide a surprising advantage over the prior art. Mr Clifford suggested one possible advantage and this is also discussed in a letter from Marks & Clerk to the Comptroller dated 9 November 1992. It is that the tape roll shown in the US specification would run out of alignment when rolled up because it would be thickened by the masking material at one edge, whereas a tape roll with an uncoated edge portion would roll up truly. I have no evidence in support of this argument. This alleged advantage is not mentioned in the present specification,

which gives no explanation of the nature of the non-adhesive portions and omits the cited US document from its statement of prior art. Neither is there any mention of the alleged problem in the earlier specification which I note describes the masking agent as an ink or stain. These are both fluid-based colouring agents, which in my experience would have a minimal affect on the overall thickness of the relevant region.

In the absence of evidence, I find it difficult to come to a definite conclusion on this question, but two further points suggest that it is unnecessary to do so. The first is that the particular construction used in the cited US specification is designed to do two things: not only to render the edge portion of the tape non-adhesive, but simultaneously to provide it with a distinctive colour. The present structure does seek to provide a colour and would therefore have no use for a masking ink or stain. There would appear to be only a limited number of ways of providing an adhesive-coated tape with a non-adhesive edge portion and, in the absence of evidence to the contrary, I have difficulty in accepting that omitting the adhesive in the non-adhesive region is not one of the more obvious ones which an inventor would be likely to try at an early stage. That this is in fact the case seems to me to be confirmed by the statements quoted above from pages 10 and 15 of the specification as originally filed, which indicate that when the invention was made, the applicant did not consider that he had invented anything by his inclusion in some of the illustrative embodiments of a non-adhesive edge portion. The fact that these passages have now been deleted without explanation, does not in my view affect their relevance to the presence or absence of an inventive step in claim 1. I see further confirmation that the applicant's own view on inventive step was as indicated above in the lack of any explanation of the nature of the non-adhesive portions in the relevant description.

Accordingly, I am unable to accept Mr Clifford's submissions on this question and I find that present claim 1 does not comply with section 1(1)(b) in that it does not involve an inventive step over the disclosure of US Patent Specification 4,727,616.

The final substantive point to be considered is whether or not claim 2 contains an inventive step by virtue of its requiring the presence of two non-adhesive regions, one on each edge of the tape, with the slit extending the full width of the adhesive coating therebetween, as illustrated, for example, in Figure 1 of the drawings. It seems to me that since it is already known to provide a device of the type originally claimed with a single non-adhesive edge

region coincident with an unslit portion of the tape, the provision of two such regions is <u>prima</u> <u>facie</u> non-inventive and can only be inventive if a new and surprising advantage results therefrom. I therefore reject Mr Clifford's first assertion on this question, which was to the effect that the device of claim 2 is not obvious simply because it would not be obvious to provide two non-adhesive regions when there would be no general advantage in doing so.

Mr Clifford also suggested a possible advantage for the device claimed in claim 2 in the limited circumstances where the non-adhesive edge portions are provided by masking, as in the cited specification. This turned on his previous submission that a masked non-adhesive edge portion would be thicker than the remainder of the tape and thereby prevent it from rolling up truly. As indicated above I am unable to come to a definite conclusion on the question of local thickening of the masked adhesive regions of tape in the cited US Specification, but I do accept that if such thickening occurs, problems with winding the tape will be avoided by a pair of masked non-adhesive edge portions balancing one another along each side of the tape. However, this alleged advantage would only be realised in one special case of the generality of claim 2, a situation moreover, which is not illustrated by any of the specific disclosure on which the claim is said to be based. Accordingly I do not see this possible limited advantage as providing an inventive step for claim 2 in its present form. Neither do I see it as possible to construct a valid claim embodying this advantage which is adequately supported by the present disclosure.

I also see as significant to the question of inventive step in claim 2, the passage quoted above from page 10 of the original specification to the effect that the use of one <u>or more</u> non-adhesive side portions is well known in the prior art and is not considered part of the present invention.

When all these considerations are taken into account, I am unable to recognise any surprising advantage in the subject-matter claimed in claim 2 over that which has previously been disclosed which would suggest that its distinguishing feature is inventive, and I consequently conclude that claim 2 also fails to comply with section 1(1)(b) in that it does not involve an inventive step over the disclosure of US Patent Specification 4,727,616.

Having found present claims 1 and 2 to be invalid for the various reasons indicated above, I refuse this application to proceed to grant unless it is amended to make good these

deficiencies and I allow a period of six weeks from, 20 January 1993, the date of notification of this decision, for such amendment to be filed and approved. As this is a technical decision the period for appeal to the Patents Court will also be six weeks from the same date.

Dated this 28 day of JANUARY 1993



G C Brown

Principal Examiner acting for the Comptroller



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