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Datasheet for the decision of 19 November 2010

Case Number: T 0865/10 - 3.2.04

Application Number: 02704931.1

Publication Number: 1370174

IPC: A47L 13/16

Language of the proceedings: EN

Title of invention:
Cleaning cloth

Applicant:
Hockey-Smith, William, et al

Headword:
-

Relevant legal provisions:
EPC Art. 52(1), 56

Relevant legal provisions (EPC 1973):
-

Keyword:
"Inventive step (no)"

Decisions cited:
-

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0865/10 - 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 19 November 2010

Appellant: Hockey-Smith, William
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 20 November 2009 refusing European patent application No. 02704931.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman: A. de Vries
Members: C. Scheibling
C. Heath

Summary of Facts and Submissions

I. The Appellant lodged an appeal, received 1 February 2010, against the decision of the Examining Division posted 20 November 2009, refusing the European patent application No. 02 704 931.1 and simultaneously paid the required fee. The grounds of appeal were received 30 March 2010.

In its decision the Examining Division held that the application did not meet the requirements of Articles 52(1) and 56 EPC for lack of inventive step departing from the following document as closest prior art:
D1: WO-A-00/58092.

II. Oral proceedings before the Board were held 19 November 2010.

III. The Appellant requests that the decision under appeal be set aside and that a patent be granted on the basis of the sole and main request, claim 1 of which was filed in the oral proceedings before the Board, claims 2 to 4 of which are as filed with the grounds of appeal, and claims 5 and 6 filed as claims 7 and 8 with the grounds of appeal.

IV. The wording of claim 1 is as follows:

"A cloth, formed at least in part from yarn which includes an agent or agents that exhibit an anti-bacterial and/or anti-fungal property, characterized in that a carrier web (10) is formed at least in part from the yarn which includes an agent or agents that exhibit an anti-bacterial and/or anti-fungal property, onto

which a multiplicity of loops (12) of yarn are formed, distributed over the surface of the cloth and projecting loosely therefrom, on both sides thereof, the yarn which forms the loops (12) comprising a synthetic plastic material subdivided into a multiplicity of filaments or fibers, the carrier web (10) being of knitted construction and the loops (12) forming part of this knitted construction, such that the loops (12) provide an enhanced absorbency while the carrier web (10) inhibits the growth of bacteria and/or fungi on the cloth."

V. The Appellant argued as follows:

The cloth of D1 may contain antimicrobial yarn and split yarn as distinct yarns, it however prescribes that the antimicrobial material constitute 18% of the total material to ensure an inhibitive effect on bacterial growth. Adding projecting loops of split yarn will dilute the quantity of antimicrobial yarn and seriously compromise its effectiveness. The skilled person would therefore not consider this measure.

He would also not consider this technique for a material made of synthetic yarns as it is generally associated with cotton.

Even if he were to add terry loops that practice excludes loops of another material. He would thus not arrive at a cloth with web and loops made of different yarns.

Finally, the claimed cloth has proven difficult to manufacture. Numerous manufacturers approached by the

inventor declined. This technical difficulty supports inventive step of the cloth.

Reasons for the Decision

1. The appeal is admissible.

2. *Background of the Invention*

The application concerns a cloth with a carrier web with loops of yarn projecting from the web in which the web is formed at least in part from yarn including an anti-bacterial or anti-fungal agent, while the loops are made of synthetic plastic material subdivided into a multiplicity of fibres or filaments. While the web material inhibits growth of bacteria or fungi, the split loops per se make the cloth feel soft and give it enhanced cleaning and absorbency properties, see description page 4, final paragraph.

3. *Lack of Inventive Step*

3.1 D1 undisputedly represents the closest prior art. In particular, it describes, see the paragraph bridging pages 8 and 9, a cloth made of knitted material 18, shown in figure 2, formed in part from yarn 10 that is antimicrobial, meaning both antibacterial and antifungal, page 2, lines 3 to 5. The knitted web also includes a synthetic plastics yarn 12, namely made of polyamides and polyesters, page 2, lines 12 to 17, which has been subdivided or split into multiple fibres or filaments, page 9, lines 14 to 18, so-called ultra-microfibers. The ultra-microfiber yarn 12 removes and

absorbs particles and microbial organisms, while antimicrobial yarn 10 prevents microbe reproduction, see also page 11, line 13, to page 12, line 14. As is clear from figure 2 the yarns 10 and 12 are arranged as distinct threads in the knit.

3.2 The cloth of claim 1 of the sole request differs from this prior art cloth in that a *multiplicity of loops* of the split, synthetic plastics yarn are *distributed over the cloth's surface*, *projecting loosely therefrom on both sides* and *forming part of the knitted construction*. The multiplicity of loops gives the cloth a soft texture and efficient cleaning properties, see description page 2, lines 6 to 11. The benefits or effects of loops on both sides of the cloth and forming part of the knit are not discussed in the description but may be taken to reside in the fact that the cloth presents the same properties on both sides doubling its cleaning and absorbing properties, while the loops are fixedly connected to the fabric.

3.3 As acknowledged on page 2, lines 6 to 11, the practice of providing loops projecting from the cloth face is conventional in the textiles industry, where such loops are commonly referred to as "terry" or "terry loops" and the resultant material as "terry cloth" or "terry towelling", see any English language dictionary under "terry". The practice is commonly applied to a variety of materials both woven and knitted (witness such terms as "warp-" and "weft-knitted terry") to give the material a soft texture and improved cleaning and absorbency properties.

Towels provide a ubiquitous example, with the terry loops producing the towel's characteristic soft, plush feel and its ability to absorb moisture. In that example, as inspection will show, the loops are densely distributed over the towel's surface, usually on both sides, and form an integral part of the fabric, as is in fact inherent in the technique of "terrying".

3.4 The skilled person, a textiles engineer with comprehensive knowledge of textiles and their manufacture, will be particularly familiar with the technique of terrying, more particularly so where towels are concerned. D1, page 12, line 18, specifically mentions towels as an application for its composite cloth. In realizing such a towel using a knitted cloth as in D1, the skilled person will, as a matter of obviousness, draw on the technique of terrying so common in towels to terry the cloth and so give it a smooth texture and increased cleaning and absorbing properties. Following the familiar example of towels, he will do so on both sides, across both surfaces. The loops will, naturally, form part of the fabric itself.

Given that D1 identifies the ultra micro-fibre yarn's main function as cleaning and absorbing, see the paragraph bridging pages 11 and 12, it also goes without saying that the skilled person will choose this yarn to form the projecting loops of the terry cloth that constitute its outer contact surface and the main function of which is to clean and absorb.

In this manner he arrives at a cloth according to claim 1 without the exercise of inventive skills. The claimed cloth thus lacks inventive step.

3.5 The Board sees no bar to terrying cloth in the value of 18% given in D1 for the content of antimicrobial yarn. The skilled person will be mindful of this recommendation and ensure that the figure is met also when he manufactures the cloth with terry loops. Nor is there any apparent inherent technical difficulty in achieving this figure for terry loops.

The claim that terry loops are practised generally only for cotton fabrics is unsubstantiated and also fails to convince the Board. Moreover, it appears in conflict with the observation that many terry towels in daily use are made of synthetic material.

Finally, that only one of a large number of manufacturers approached by the inventor may have been able to produce the claimed cloth - a contention which is undocumented - does not necessarily imply inventive step of the claimed cloth. A manufacturer may not have suitable equipment or consider it profitable. Or it may be that there is a genuine technical difficulty to manufacture such a cloth and that this has been overcome somehow. This however would rather point to a special technical significance of the method of manufacture than of the cloth itself.

3.6 From the above the Board concludes that the subject-matter of claim 1 of the sole request fails to meet the requirements of Article 52(1) in combination with

Article 56 EPC. This request must fail. The Board therefore confirms the appealed decision's finding.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar The Chairman

G. Magouliotis A. de Vries