

FEDERAL SUPREME COURT

ON BEHALF OF THE PEOPLE

JUDGMENT

X ZR 113/20

Announced on: October 13, 2022 Schönthal Clerk of the Court as Clerk of the Registry

in the patent nullity case

ECLI:EN:BGH:2022:131022UXZR113.20.0

The X. Civil Senate of the Federal Supreme Court, at the oral hearing on October 13, 2022, by the Judges Dr. Grabinski, Hoffmann and Dr. Deichfuß, the Judge Dr. Marx and the Judge Dr. Crummenerl

found to be right:

On appeal, the judgment of the 6th Senate (nullity senate) of the Federal Patent Court of August 12, 2020, is amended.

The complaint is dismissed.

Orders the plaintiff to pay the costs.

By law

Facts:

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The defendant is the owner of European patent 2 365 794 (patent in suit), which was filed on January 26, 2010, claiming an Austrian priority of January 28, 2009, and concerns a wound cleansing device. After conducting opposition proceedings, the procedural language of patent claim 1, to which nine further claims are referred back, reads:

- 1. Wound cleansing device, which has or is a wound cleansing cloth (1) on, which has at least one carrier layer (2) and threads (3) of synthetic fibers arranged on the carrier layer (2) and projecting from the carrier layer (2), wherein at least some of the threads (3) have freely projecting, preferably cut-off, ends (4) on their side facing away from the carrier layer (2), wherein the threads (3) have, preferably cut-off, ends (4) or and the threads projecting from the carrier layer form a pile arranged on the carrier layer and projecting therefrom, and the wound cleansing cloth is sterilely packaged in a preferably airtightly sealed package (7), characterized in that the pile height is between 3 and 30 mm and the threads projecting from the carrier layer have between 0.5 and 20 dtex.
- Claim 11 is directed to the use of synthetic fibers in the manufacture of a wound cleansing device according to claims 1 to 10.

The plaintiff challenged the patent in suit to the extent of claims 1, 2, 3, 7, 9, 10 and 11 for lack of patentability. The defendant has defended the patent as granted

and, in the alternative, in nine amended versions.

The Patent Court declared the patent in suit invalid to the extent requested. The defendant has appealed against this decision. It continues to defend the patent in suit as granted and, in the alternative, in nine amended versions. The auxiliary requests 1 to 4 and 7 to 9 are unchanged, while auxiliary requests 5 and 6 have been partially reworded. The plaintiff opposes the appeal.

Reasons for Decision:

The appeal is admissible and leads to the dismissal of the nullity action.

Ι. The patent in suit concerns a device for cleaning wounds.

according to the description of the patent in suit, the treatment of a 1. wound begins with its cleaning.

It is known and customary to use a cotton swab for this purpose, and cleaning of the wound by surgical or hydrosurgical procedures, by means of shock waves or ultrasound can also be considered. The central point is, on the one hand, to remove the contamination as completely as possible, but on the other hand, not to reverse the healing process that has already occurred by destroying the newly formed wound closure (para. 2).

Debridement is of particular importance for acute and chronic wounds. This term is used to describe the removal of substances produced by the body, such as excess fluid (exudate), fibrin coatings, dead tissue, and so on. At present, this is practically only possible by surgical or hydro-surgical means or by shock wave treatment. Another method, however controversial, is the long-term application of moistened wound dressings. These methods of debridement are costly and painful and in some cases aggressive. The goal of preserving the granulation tissue as unimpaired as possible until early epithelialization is not achieved to the desired extent by these methods (para. 3).

10 European patent application 552 933 discloses a debridement sponge constructed from multiple layers of a fibrous cloth. U.S. application 2004/0265534 (NK6) discloses a laminated cloth that has features of the generic term of claim 1

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and can be used in various ways, including in the medical field. US patent 3 561 441 (NK14) described a wound dressing according to the generic term of claim 1 (paragraph 5).

- 11 2. Against this background, the technical problem underlying the patent in suit is to provide a device with which a wound can be cleaned of contaminants without disturbing the healing process that has already occurred.
- 12 3. To solve this task, claim 1 proposes a device whose features can be structured as follows (deviating feature analysis of the Patent Court in square brackets):
 - 1. A Wound cleansing assembly which comprises or is a wound cleansing cloth **[1]**.
 - 2. The wound cleansing cloth having
 - 2.1 at least one supporting layer (2) [1.1],
 - 2.2 threads(3)arranged on the supporting layer (2) and protruding from the supporting layer(2)
 - [1.2 and 1.2.1], that
 - 2.2.1 have between 0.5 and 20 dtex [1.2.4.1];

2.2.2 one of the carrier layer arranged and pile protruding from it **[1.2.4]**;

- 2.3 the pile height is between 3 and 30 mm [1.2.4.2].
- 3. At least some of the threads (3) have
 - 3.1 freely projecting, preferably cut-off, ends (4) **[1.2.2]** on their side facing away from the carrier layer (2),
 - 3.2 ends (4) or end faces **[1.2.3]** running obliquely to their longitudinal extent (5), preferably cut off.

- 4. the wound cleansing cloth is sterilely packaged in a preferably airtight package (7) [2].
- 13 4. Some features require explanation:
- 14 a) The wound cleansing device is or has a wound cleansing cloth. The cloth must then have the suitability to serve for cleaning a wound.
- As can be seen from the description, the patent in suit understands wound cleansing to mean both the removal of material foreign to the body, such as dirt particles, and debridement, i.e. the removal of substances foreign to the body that interfere with wound healing (paragraphs 3 and 10 f.).
- 16 With this broad understanding of the term wound cleansing, any textile material that can be used to cover a wound is also suitable for cleansing it. The description accordingly refers to the cleaning of a wound by means of cotton swabs, which is known in the prior art.
- b) The wound cleansing wipe has a backing layer on which threads of synthetic fibers are arranged.
- 18 The threads preferably consist entirely of synthetic material. However, as can be seen from the description, this is not mandatory (par. 12, sp. 4 lines 51 f.).
- 19 c) The threads protrude from the carrier layer according to feature 2.2.
- 20 It follows from this that the threads arranged on the carrier layer do not run parallel to it, but at a certain angle to it. More detailed specifications are not to be

taken from claim 1 in this respect. According to the description, the threads can be relatively soft, but also rather stiff and bristle-like (paragraph 12, column 4 line 49 f.).

- 21 d) The threads have a weight of 0.5 to 20 dtex (feature 2.2.1). 1 dtex corresponds to a weight of 1 g/10,000 m (= 0.9 den).
- 22 Patent claim 1 does not contain any information about the length of the threads.
- e) According to feature 2.2.2, the threads form a pile projecting from the backing layer.
- 24 aa) Contrary to the opinion of the appeal, it is not to be inferred from claim 1that the carrier layer as a whole is densely covered with threads.
- A dense arrangement of the threads on the carrier layer is described in the description only as preferred, but not as mandatory (para. 23, sp. 8 lines 10-12). Such a design, in which the threads are arranged perpendicular to the carrier layer, is shown schematically in Figure 1.



A pile can, however, also be present if there are gaps between the threads or tufts of such threads and if the threads are not arranged perpendicularly to the carrier layer. It also does not follow from the function of the pile that the carrier layer must be fully covered with threads. 27 bb) Contrary to the defendant's opinion, claim 1 does not specify that the pile consists only of threads with freely projecting ends; rather, it may also comprise loops. According to feature 3.1, it is sufficient if at least some of the threads arranged on and projecting from the backing layer have freely projecting ends.

f) According to feature 2.3, the pile height is between 3 and 30 mm.

29 Contrary to the defendant's view, the effective length of the threads - from the exit from the base or backing layer to the outermost end - is not to be equated with the pile height.

- 30 However, the length of the threads may coincide with the pile height if the threads project vertically from the carrier layer, as shown in Figure 1 of the patent specification reproduced above. The equation of pile height and thread length at the point in the description cited by the defendant (para. 23, column 8, line 29 f.) also refers to this figure. However, this is not necessary. As the description explains, it depends on the concrete design of the threads whether they protrude from the carrier layer in such a way as can be seen in Figure 1 (para. 23, sp. 8 lines 12-20). If the threads protrude obliquely from the carrier layer, which is not excluded by claim 1, pile height and thread length diverge.
- 31 This applies a fortiori insofar as the cloth also has threads which do not have a free end but have the form of a loop. This also does not exclude claim 1.
- 32 How the pile height is to be determined if the threads are of different lengths or have a different orientation is not explained further in the description. With regard to the function as a wound cleansing device or wound cleansing cloth, what is important in such a case is the height with which the threads projecting from the

backing layer and forming the pile contribute to effectively removing the disturbing materials from the wound.

33 II. The Patent Court gave the following main reasons for its decision:

The device according to claim 1 as granted would result in an obvious way from the combination of the Japanese patent Hei 2000175958 (NK5) and the US patent application 2004/0265534 (NK6).

5 NK5 concerns a three-layer wound dressing that can absorb wound exudate. Since wound exudate contains avital tissue, the cloth can also be used for debridement. The nonwoven layer facing the wound forms a pile of synthetic fibers arranged on and protruding from a backing layer. The skilled person, a graduate engineer in medical technology with a university education, who is familiar with the development of dressings for the treatment and cleansing of wounds, consults a doctor for the medical aspects and cooperates with an engineer in textile technology with regard to the material properties, knows that the production of such a nonwoven layer by needle punching, as well as the application of conventional cutting techniques, results in fibers with freely projecting and tapering ends. The range indicated for the fineness of the fibers overlapped with the range indicated in feature 2.2.1.

Based on this, the skilled person will orientate himself in determining the thickness of the fleece layer facing the wound - the pile height - to the thickness of the carrier layer, which is 1 to 20 mm. In addition, he would take from NK6 that shorter fibers of 1 cm and longer fibers of 2 to 8 cm are described there. This would result in pile heights in the range of feature 2.3.

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- 37 III. This assessment does not withstand appellate review.
- The Patent Court correctly assumed that the prior art does not anticipate the subject matter of claim 1.
- 39 a) Japanese patent Hei 2000-175958 (NK5, German translation = B13)does not fully disclose the subject matter of claim 1.
- 40 aa) NK5 relates to a wound dressing composed of three layers.
- According to this caveat, a wound dressing must meet a wide range of requirements. The absorption capacity must be high in order to extract the exudate from the wound surface. Absorbed fluid must not escape from the wound dressing. The wound dressing must be permeable to air and at the same time keep the wound in as aseptic a state as possible. Finally, it must not adhere to the wound in order not to impair wound healing and to avoid pain during dressing changes (B13 p. 4).
- 42 Gauze, which is traditionally placed on the wound before fixation of the dressing, does not sufficiently fulfill these requirements. It is hydrophilic because it consists of cotton yarns. When the exudate dries out, the gauze adheres to the wound. A change of dressing is accordingly painful and disturbs the healing process. In addition, the surface of such dressings is not tight, so that microorganisms can penetrate (B13 p. 3 f.).
- 43 NK5 proposes a wound dressing with three layers as a solution, as shown in the schematic diagram of Figure 1:





44 According to this, the wound dressing consists of a water vapor permeable, outward facing film layer 11 with a thickness of 5 to 100 μm, a nonwoven layer 12 made of hydrophobic and highly absorbent fibers (absorption layer) and a further nonwoven layer 13 (wound contact layer), which lies on the wound and consists of hydrophobic fibers (B13 p. 5 f.).

According to NK5, the two nonwoven layers 12 and 13 can be produced by one of the generally known processes, such as the wet or dry processes, the needling process, in which the webs are pierced by barbed needles, thus causing mechanical entanglement of the fibers, the splunlace process, in which the fibers are consolidated by means of high-pressure water jets, or the spunbond process (B13 p. 7).

Since the nonwoven layer 12 has both hydrophobic and highly absorbent fibers, such as cotton or cellulose, it can absorb wound exudate. The ratio of hydrophobic to highly absorbent fibers is preferably 6:4 to 8:2. The liquid absorbed by the highly absorbent fibers can evaporate into the ambient air via the film 11 (B13 p. 6). The hydrophobic fibers of the nonwoven layer 12 are synthetic fibers, such as polyester, nylon, acrylic, polypropylene, or polyethylene. NK5 gives values between 0.3 den and 5 den as the preferred weight of the fibers of this layer. According to NK5, the thickness of the nonwoven layer 12 is preferably 1 to 20 mm (B13 p. 6-8).

The wound contact layer 13 consists only of hydrophobic fibers, such as polyester, polypropylene, polyethylene, nylon or thermoplastic elastomers. They do not absorb the wound exudate, but transport it to layer 12. They do not adhere to the new tissue forming on the wound surface and can be easily detached from the wound surface during dressing changes. According to NK5, the density of layer 13 can be easily adjusted. Again, 0.3 den to 5 den is indicated as the preferred size (B13 p. 9). Such a layer of hydrophobic fibers offers advantages over a wound dressing layer made of a polyurethane film, which is provided with slits to drain off exudate (B13 p. 8).

The nonwoven layers 12 and 13 can be produced separately according to NK5 and then bonded together. This bonding can be carried out, for example, by needling, in a spunlace process or in a dry process. It is also possible to directly spin on one side of the nonwoven layer 12 one of the hydrophobic fiber materials that make up the nonwoven layer 13 by means of a spunbond process. Compared to the needling or spunlace process, this has the advantage that the layer 13 has a dense and smooth surface (B13 p. 9 f.).

To ensure that the exudate quickly penetrates the fleece layer 13, this layer is preferably as thin as possible according to NK5 (B13 p. 10).

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- 50 bb) The Patent Court correctly assumed that NK5 discloses a device with features 1 to 2.2.2.
- 51 Characteristic group 3 is also anticipated.

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- 52 The Patent Court found unchallenged that the production of a nonwoven layer by the needling process addressed in NK5 produces fibers with freely projecting and sloping ends.
- 53 cc) However, there is no anticipation of feature 2.3.
- (1) NK5 does not contain any explicit information on the thickness of the wound contact layer and thus on the pile height within the meaning of feature 2.3. In addition to explaining the function of this layer, the citation contains the indication that its weight per unit area is preferably 5 to 50 g/m². Apart from that, it is limited to the statement that this layer is preferably as thin as possible (para. 19).
- 55 (2) According to the plaintiff, it appears to the skilled person, taking into account his technical knowledge, that the wound contact layer has a thickness of up to 3.33 mm and thus a value that falls within the range mentioned in feature 2.3.
 - The plaintiff explained this to the effect that the absorption layer and the wound contact layer were produced in the same way by needling. The person skilled in the art knew that the threads of layer 13 must not be too fine for fluidic reasons, because otherwise they would block the drainage of the exudate from the wound to the absorption layer 12. He chose a thickness for the fibers of the wound contact layer at least equal to that of the fibers of layer 12. He also took into account that

a layer thickness of less than 1.5 mm could not be achieved during manufacture by the needling process for manufacturing reasons. Since the density of both layers is also selected to be the same, the ratio of the basis weights specified in NK5 for both layers (layer 12: 30 to 300 g/m², layer 13: 5 to 50 g/m² = 6:1) results in a thickness of layer 13 of (20:6 =) 3.33 mm.

- 57 (3) The Senate cannot agree with this view.
- 58 The plaintiff has not shown sufficient evidence that the skilled person, as assumed by her, chooses the same density for the absorption layer and the wound contact layer when manufacturing a wound dressing according to NK5.
- 59 The different function of the two layers speaks against this assumption. The absorption layer comprises highly absorbent fibers, preferably in a proportion of 20 to 40 percent, which are intended to absorb large quantities of exudate. This layer must therefore be designed to provide sufficient space to absorb an appropriate amount of fluid. In contrast, the design of the wound contact layer is geared to its function of merely transferring the exudate from the wound surface to the absorption layer.
- There is no indication from NK5 that the density of the two nonwoven layers 12 and 13 should be the same. Rather, it speaks of the density of wound contact layer 13 being easily adjusted during manufacture (B13 p. 9 above), suggesting that the density of this layer can be chosen differently within the limits imposed by its function.
- 61 The considerations made by the plaintiff also do not sufficiently take into account the fact that according to NK5 the wound contact layer should preferably be as thin as possible (B13 p. 10). This speaks against the assumption made by the plaintiff that the weight per unit area of the wound contact layer is selected to be one sixth

of the weight per unit area of the absorption layer. The fact that the ranges of 30 to 300 g/m2 and 5 to 50 g/m2 given in this respect in NK5 are in this ratio does not compel the assumption that the basis weights of the two layers are always chosen to correspond to this ratio. In the only embodiment example that contains information on this, the basis weights of the absorption layer and the wound contact layer are not in the ratio 6:1, but in the ratio 10:1 (B13 p. 16/17, embodiment example 2, basis weight of layer 12: 100 g/m2, basis weight of layer 13: 10 g/m2).

The plaintiff's reference to the manufacturing limitations of producing the wound contact layer using the needling process does not contradict this. According to NK5, the manufacture of the wound contact layer using the needling process is not mandatory; rather, the citation points to the possibility of applying this layer to the absorption layer using the spunbond process (B13 p. 10 and p. 17).

b) The US patent application 2004/0265534 (NK6 = D8 in the European opposition proceedings) also does not oppose the novelty of the subject matter of claim 1.

64 aa) NK6 describes laminate webs for a wide variety of applications formed from at least two first and second precursor webs, at least one of which is a nonwoven web. This offers the possibility of providing a laminate whose sides have different properties, for example in terms of softness and volume.

- 65 In the prior art, it was already known to combine two nonwoven materials into a laminate to achieve the advantages of different materials in one laminate web.
- 66 Such a laminate could be produced, for example, by gluing, but also by other means, such as needle punching. Needle punching causes some fibers to extend through the entire thickness of the fabric and beyond the surface, leaving segments of filaments protruding from the outer surface of the web.
- 67 However, the known processes are either too expensive or, because of the use of adhesive or thermal bonding, result in laminates that are too stiff.
- 68 NK6 describes a way of producing a laminate from two nonwoven webs using the figures below:



Fig. 1







Fig. 5

A web (1) consists of two precursor webs (20) and (21), which are made of a nonwoven material, for example. The two webs can be joined together by applying mechanical pressure from the side of the first precursor web (20) through teeth (110) in a machine as shown in Figure 5. If suitable materials are selected, this results in the formation of slits in the second precursor web (21) through which fiber material of the first precursor web (20) is pressed. The frictional engagement between the tufts and the openings of the second precursor web (21) ("frictional engagement", par. 48, cf. also par. 88 "locking effect") ensures a laminate web structure with permanent pile on one side which can be formed without adhesives.

This procedure forms tufts of loops (8) and of loose ends (18) extending upwardly from the surface of the precursor web (21). According to NK6, it is known and not

undesirable that a certain percentage of fibers pushed from the plane of the first surface (12) of the first precursor web (20) through the second precursor web (21) do not form loops but break, forming loose ends (18). It would also be possible to have embodiments in which most or even all of the fibers of the tufts (6) are loose fiber ends (18). Such tufts could also provide a soft feel.

- 71 According to NK6, this results in a wide range of design options. The number, spacing and dimensions of the tufts can be varied. It is also possible to provide 100 tufts per square centimeter. The tufts could be so closely spaced that the web has a terrycloth-like feel on the upper side. The height, length and width of the individual tufts could also be varied. Individual tufts could be up to about 30 mm in length ("Single tufts can be as long as about 3 cm in length," para. 38). For the embodiments addressed in the description, the loop height ranges from 1.37 to 1.8 mm (Table 1, par. 100). For the first example, where the fiber weight is in the range of feature 2.2.1, the pile height is given as 1.59 mm.
- 72 Shorter and longer fibers can be combined, with the longer fibers being about 2 to 8 cm long (par. 40). The basis weight of the web can range from 10 to 500 g/m². The fibers of the nonwoven webs may be made of polymers such as polyethylene, polypropylene, polyester, or blends thereof. The fiber constituents may range from about 0.1 denier to about 100 denier.
- 73 The webs can be used for a variety of applications, including as wipes for medical treatment, as gauze or as a base fabric for adhesive plasters (par. 93).

54 bb) NK6 does not fully anticipate a wound cleansing wipe having the features of claim 1.

75 (1) NK6 discloses feature 1.

According to paragraph 93 thereof, a laminate according to the invention can also be used as a wipe for medical treatment.

77 (2) Features 2, 2.1, 2.2 and 2.2.2 are also disclosed in their own right.

In laminates of the type described in NK6, the second precursor web can be regarded as a carrier layer within the meaning of feature 2.1. Threads of synthetic fibers are arranged on this layer, which, as can be seen in particular from Figure 1, protrude from the carrier layer and form a pile.

- (3) NK6 further discloses the use of fibers having a fiber weight of 0.1 to 100 denier (para. 29), and thus a range comprising the range according to feature 2.2.1.
- 80 (4) Characteristic group 3 is also anticipated.

As NK6 explains, the nonwoven web described therein does not have only fiber loops. Rather, it is not undesirable for a certain percentage of fibers to break and form loose fiber ends, and embodiments in which most or even all fibers are loose fiber ends are also contemplated (para. 40). In addition, fiber breakage also results in ends that are oblique to the longitudinal direction of the fibers.

82 (5) However, there is no disclosure of a wound cleansing clothwith a pile height according to feature 2.3.

- According to Table 1 of NK6 (par. 100), the embodiments discussed therein have a loop height of 1.37 to 1.83 mm, and thus a pile whose height is well below the range specified in feature 2.3.
- Elsewhere, NK6 mentions that individual fiber tufts could be up to about 3 cm long (par. 38). However, from the fact that individual such tufts can have a length of 3 cm, it does not follow directly and unambiguously that a corresponding laminate has this pile height.
- The plaintiff additionally claimed that the loop height is determined by the tooth height. While this is 3.7 mm for the design examples discussed in Table 1, it can be up to 5 mm according to paragraph 75. If such a tooth height is selected, the loop height in embodiment example 1 is just under 3 mm, and in embodiment example 4 it is over 3 mm.
- 86 It does not follow from this submission that NK6 discloses a combination of features according to the invention.
- The assessment of whether the subject matter of a patent is affected by a prior publication in a manner detrimental to novelty requires the determination of the overall content of the prior publication. The decisive factor is which technical information is disclosed directly and unambiguously to the person skilled in the art.
- 88 NK6 deals with the joining of two webs of nonwoven material to form a laminate as such. It teaches how to select the thickness and material of the two webs in such a way that fiber tufts of one web extend through the second web and join the two webs together in a force-fit. Towards the end of the description, it points out

that according to the proposed procedure, the relevant factors can be varied in many ways, which opens up a large number of possible uses and applications (paras. 92 and 93). Among many other possibilities, cloths and films for medical use are also mentioned, without any specific information on fiber thickness or pile height being given for such devices.

Under these circumstances, it cannot be assumed that for the person skilled in the art, every combination possible thereafter results from the disclosure content of NK6 as a teaching for technical action. It is true that a certain type of joining of two nonwoven webs in the manufacture of a laminate can be inferred from NK6, which is also suitable for the manufacture of wipes for medical treatment. However, NK6 does not disclose the height of the pile formed by the fiber tufts specifically for this application. Accordingly, there is no disclosure for setting the tooth height for slitting the second precursor web - in deviation from the information on the embodiments listed in Table 1 - at a height such that a pile height of at least 3 mm is produced when manufacturing wipes for medical treatment. The fact that the person skilled in the art is able to produce a large number of laminates falling within the teachings of NK6 using his expertise cannot be equated with the direct and unambiguous disclosure of all such laminates.

- 90 c) Finally, the U.S. patent 3,561,441 (NK14 = D10 in opposition = P7 in qualified reference) does not completely anticipate the subject matter of claim 1.
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aa) NK14 relates to a sling fabric for surgical purposes.

- 92 Such a tissue has threads arranged in loops. To ensure good wound healing, such a cover would have to meet various requirements. Wound secretions must be drained, the wound must be ventilated to prevent overheating, the cover should not adhere to the wound, and finally the wound must be immobilized.
- 93 NK14 suggests a modified loop arrangement for this purpose. The loops could be unsheared or sheared to form a pile. The latter facilitates the absorption of wound fluids (wicking and/or absorbing the wound fluids) and reduces adhesion to the wound (Sp. 2 Z. 2-11).
- In order to prevent adhesion, the loops that come into direct contact with the wound could be made of a material containing polyfluorinated polyols (Sp. 2 line 39 et seq.). It is also possible to provide longer loops made of such material and shorter loops made of a well absorbing material, such as cotton (Sp. 2 Z. 65 et seq.).
- 95 Figure 7 shows an example with sheared loops of the same height. Nonadherent sutures 14 and fluid-absorbent sutures 16 are provided. Both come into contact with the wound 12. Figure 8 shows an example of an embodiment in which the threads 16 are shorter than the threads 14.



bb) It can be left open whether a tissue has feature 3.2 according to NK14.
It is true that Figures 7 and 8 do not show any obliquely extending thread ends. However, the Patent Court stated without being challenged in this respect that it is known to the skilled person that the cutting of loops inevitably leads to a certain extent to threads with ends running obliquely to their longitudinal extension.

98 cc) In any case, there is no anticipation of features 2.2.1 and 2.3 NK14 does not contain information on the weight of the fibers or the pile height.

2. Contrary to the Patent Court's view, the protected subject matter of claim1 is not obvious.

100 There was no suggestion in the prior art to further develop the wound dressing described in NK5 such that the pile height is between 3 and 30 mm.

- 101 a) Contrary to the opinion of the Patent Court, the choice of such a pile height for the layer lying on the wound was not suggested to the skilled person by the height mentioned there for the absorption layer and the same manufacturing process.
- 102 If NK5 specifies a range of 1 to 20 mm for the central nonwoven layer, it is not obvious why a height of at least 3 mm should be selected for the pile of the layer which lies on the wound. This applies all the more since, according to NK5, this layer has a different function than the nonwoven layer 12 and should preferably be as thin as possible to ensure rapid transfer of the exudate from the surface of the wound to the middle nonwoven layer (Para. 19).
- 103 An indication of a pile height according to the invention also does not result from the information contained in NK5 on the basis weight of the two layers 12 and 13 (para. 10). A derivation of the layer thickness from the weight per unit area, as undertaken by the plaintiff in the appeal, presupposes an identical structure of the two layers. Such a correspondence of the structure of the two fleece layers is not to be inferred from NK5 and, as already stated above, is also not obvious due to the different functions assigned to them.
- b) The NK6 did not give rise to any further suggestions.
- 105 The conclusion drawn by the Patent Court from the values given there for the length of the fibers does not hold water because, as explained above, the pile height cannot be readily inferred from the thread length.
- 106 The Patent Court bases its assessment on the fact that the length of the loops and the height of the pile result from the length of the fibers. However, such a

connection cannot be inferred from NK6. For while an exemplary fiber length of 1 to 8 cm is mentioned there ("An exemplary mixture of fiber lengths can include fibers of approximately 2 to 8 centimeters for the longer fibers and less than about 1 centimeter for the shorter fibers", para. 40), the loop height for the embodiments according to table 1 (para. 100) is indicated with values between 1.37 and 1.83 mm, and thus clearly below the range according to feature 2.3. This also applies in particular to the first example, in which the weight of the fibers is in the range given in feature 2.2.1.

- 107 It is true that NK6 explicitly states that the height of loops or fibers with loose ends can vary over a wide range (para. 92). However, there is no suggestion from NK6 that a pile height of at least 3 mm should be provided for a wound cleansing wipe.
- 108 c) A different assessment does not result even if NK6 is chosen as the starting point.
- As stated above, a pile height of 1.59 mm is given for Example 1 of NK6, which uses fibers with a weight in the range of Feature 2.2.1.
- 110 A suggestion to choose a significantly higher pile height instead for a wound cleansing wipe made of such fibers does not result from NK6 and is also not shown by the appeal.
- 111 d) The reference of the appeal to NK14 does not justify a different assessment.
- 112 In this respect, it may be assumed in favor of the plaintiff that the fiber mentioned in NK14 and marketed under the trade name Rhovyl 55 has a weight

corresponding to the range indicated in feature 2.2.1. However, there is also no indication from NK14 to choose a pile height of 3 to 30 mm.

113 IV. The decision on costs is based on Sec. 121 (2) Patent Law and § SECTION 91 CODE OF CIVIL PROCEDURE (ZPO).

| Grabinski | | Hoffmann | | Deichfuß |
|-----------|------|----------|------------|----------|
| | Marx | | Crummenerl | |

Lower court: Federal Patent Court, decision of 12.08.2020 - 6 Ni 9/19 (EP) -