Deckblatt Übersetzung

Daten der Übersetzung:

Court/Gericht:	Bundesgerichtshof
Date of Decision / Datum der Entscheidung:	2017-01-31
Docket Number / Aktenzeichen:	X ZR 119/14
Name of Decision / Name der Entscheidung:	Gestricktes Schuhoberteil

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FEDERAL COURT OF JUSTICE

IN THE NAME OF THE PEOPLE

JUDGMENT

X ZR 119/14

Pronounced on:
31 January 2017
Hartmann
Judicial Secretary as
Clerk of the court
registry

in the patent nullity proceedings

Gestricktes Schuhoberteil/
Knitted shoe upper

EPC Art. 56

The fact that for the skilled person a certain citation came into consideration as a possible starting point for efforts for further development may not be inferred solely from the factual proximity to the solution according to the invention, in particular in the case of very old state of the art at the priority date. However, if a technical solution known for many years already contains all essential elements of the invention, the assumption that the older solution lies outside the field in which, from the point of view of a skilled person, possible starting points for solving the technical problem could be found at the priority date, requires particularly careful examination.

Federal Court of Justice, judgment of 31 January 2017 - X ZR 119/14–
Federal Patent Court

ECLI:DE:BGH:2017:310117UXZR119.14.0

The X. Civil Senate of the Federal Court of Justice, following the oral hearing on 31 January 2017, attended by the presiding judge Prof. Dr. Meier-Beck, the judges Gröning and Dr. Bacher as well as the judges Schuster and Dr. Kober-Dehm

ruled that:

The appeal against the judgment of the 2nd Senate (Nullity Senate) of the Federal Patent Court of 13 November 2014 is dismissed at the expense of the defendant.

By operation of law

Facts of the case:

1 The defendant is the proprietor of European patent 1 571 938 (patent in suit) filed on 15 December 2003, claiming a priority of 18 December 2002, and granted with effect for the Federal Republic of Germany. After carrying out a limitation procedure under Art. 105a EPC, the patent in suit comprises 30 claims, of which claims 1 to 13 and 30 are directed to an article of footwear and subsidiary claims 14 and 26, each with subclaims, concern manufacturing processes. Patent claim 1 of the limited version reads in method language:

> "An article of footwear (100) having a sole structure (110) and a knit upper (120) secured to said sole structure, said knit upper being substantially formed of a textile forming at least an outer portion of the knit upper, the textile comprising:
>
> a fused area (132-136) of said textile (130), said fused area being at least partially formed from a plurality of first strands and a plurality of second strands, said first strands being formed of a first thermoplastic polymer material, and said first strands being fused

to said second strands in said fused area; and an unfused area (131) of said textile, said first strands being unfused to said second strands in said unfused area,

wherein said textile (130) is formed from mechanically manipulated yarns (146), said yarns incorporating said first strands and said second strands, and

wherein said first thermoplastic polymer material (144) has a first melting temperature; and wherein said textile (130) includes a second thermoplastic material (145) having a second melting temperature,

in order to impart stability to the upper by the fused areas of the textile without the necessity of incorporating additional components."

2 The plaintiff claimed that the subject matter of the patent in suit was inadmissibly extended even in the limited version; it was not new and was not based on inventive step. The defendant defended the patent in suit as amended and with numerous auxiliary requests. The Patent Court declared the patent in suit to be null.

3 The defendant's appeal is directed against this, with which it defends the patent in suit in a further restricted version corresponding to the first-instance auxiliary request I and, in the alternative, with eight further claim versions. Claims 1, 14 and 26, as defended by the main request, read as follows:

"1. an article of footwear (100), comprising a sole structure (110) and a knitted upper (120) attached to the sole structure,

the knitted upper being formed substantially of a textile forming at least an outer portion of the knitted upper, the textile comprising:

a bonded region (132-136) of the textile (130), the bonded region being formed at least in part of a plurality of first strands and a plurality of second strands, the first strands

being formed of a first thermoplastic polymeric material and the first strands being bonded to the second strands in the bonded region; and a non-bonded region (131) of the textile, the first strands not being bonded to the second strands in the non-bonded region,

wherein the textile (130) is formed from machine processed yarns (146), the first strands and the second strands being received within the yarns, and

wherein the first thermoplastic polymeric material (144) has a first melting temperature and wherein the first strands of the textile (130) comprise a second thermoplastic material (145) having a second melting temperature,

such that stability is imparted to the upper by the bonded portions of the textile without the need to incorporate additional components.

14. a method of manufacturing a knitted upper (120) for an article of footwear (100), the method comprising the steps of:

Providing a plurality of strands, at least a first portion of the strands comprising at least a first thermoplastic polymeric material;

incorporating the strands into a textile (130) that substantially forms the knitted upper; and

forming a bonded region (132-136) of the textile by bonding at least the first portion of the strands to a second portion of the strands only at selected locations of the knitted upper,

while the first portion and the second portion are not bonded at other, non-selected locations of the upper portion,

wherein the step of incorporating comprises forming at least

an outer portion of the knitted upper (120) from the textile (130), and

wherein the first thermoplastic polymeric material (144) has a first melting temperature; and

incorporating a second thermoplastic material (145) having a second melting temperature into the textile (130), wherein the second thermoplastic material is comprised in the first portion of the strands,

such that stability is imparted to the top by the bonded portions of the textile without the need to incorporate additional components.

26. a method of forming a knitted upper (120) for an article of footwear (100), the method comprising the steps of:

Forming at least an outer portion of the upper (120) from a textile (130),

incorporating a yarn (146) having at least one fusible strand into separate and distinct portions of the knitted upper; heating substantially the entire upper to bond the at least one fusible strand to an adjacent strand and form the separate and distinct bonded portions of the upper,

wherein the step of incorporating comprises forming the textile (130) by machine processing yarn (146) comprising the at least one fusible strand, and

disposing the at least one fusible strand only in selected areas of the knitted upper portion,

such that stability is imparted to the upper by the bonded areas of the textile without the need to incorporate additional components."

4 The plaintiff opposes the appeal.

Grounds of the decision:

5 The admissible appeal is unsuccessful.

6 I. The patent in suit relates to a shoe ("footwear article") having a sole and a knitted upper attached to the sole, and methods of making the knitted upper.

7 1. According to the patent specification, the materials selected for the upper vary depending on the type of footwear article, but generally comprise (include) a textile material. For example, athletic shoes often include textile uppers that are sewn or bonded to a thermoset foam layer (para. 2).

8 The textile material could be produced using various techniques for machine processing of yarn such as interweaving, intertwining and twisting, and interlooping. Intertwining and twisting include manufacturing processes such as braiding and knotting, while interlooping involves the formation of a large number of rows of stitches, knitting being the most common process for producing knitted fabrics (paras. 5 and 6).

9 Textiles used in footwear uppers generally achieve a lightweight, air-permeable and flexible structure that keeps the foot comfortable. To give the shoe durability and stretch resistance, additional materials such as leather, synthetic leather or rubber are usually combined with the textile (para. 8). In this regard, the use of multiple materials to achieve different properties is often inefficient from a manufacturing perspective. The use of additional materials besides textiles could also increase temperature and humidity in the shoe and reduce its breathability (paras. 9 and 10).

10 2. The patent in suit thus relates to the technical problem - not expressly addressed in the patent specification - of increasing the durability and strength of textile footwear by efficient means while maintaining wearing comfort.

11 3. As a solution, the patent in suit proposes in claim 1 in the version defended at second instance a shoe with the following features (features of the Patent Court in square brackets):

1. The shoe (100) has
   1.1 a sole (110) and
   1.2 a knitted upper (knit upper 120) attached to the sole [1.1].

2. The upper consists essentially of a textile (130) forming at least an outer portion of the upper [1.1].

3. The textile consists of yarns which are
   3.1 are machine processed and
   3.2 first and second fibers (strands) [1.7].

4. The first fibers are formed of
   4.1 a first thermoplastic polymer material having a first melting temperature; and
   4.2 a second thermoplastic material (145) having a second melting temperature [1.8].

5. The textile has:
   5.1 a bonded (fused) region (132-136) [1.2],
      5.1.1 which is formed, at least in part, from a plurality of first and second fibers [1.3],
      5.1.2 in which the first fibers are bonded to the second fibers [1.4, 1.5], and
   5.2 an unbonded (unfused) region (131) in which the first fibers are not bonded to the second fibers [1.6].

12 This is intended to achieve, as is expressly stated at the end of claim 1, that stability is imparted to the upper part by the bonded areas without the need to incorporate additional material components.

13 4. In order to understand the technical teaching described by these features, which is illustrated by the embodiment example shown in Figure 1 of the patent in suit, inserted below, it is necessary to explain:

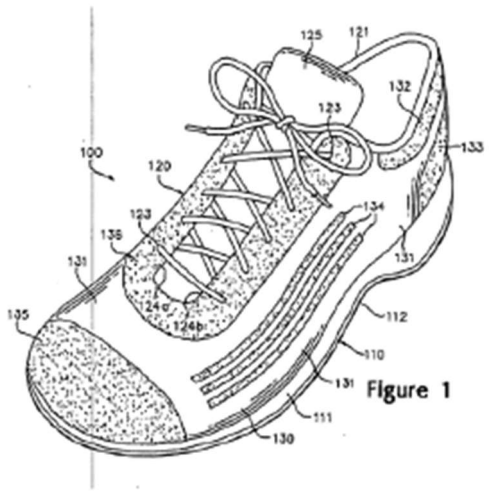
14 

Figure 1

(a) The upper of the shoe according to the invention is knitted or crocheted. The translation of the verb "to knit" as "stricken" or "wirken", on which the Patent Court based its understanding of the claim, corresponds, as the Senate is aware, to the common usage of the language. Contrary to the view of the defendant, there are no indications from the patent

description for a different understanding. The argument that figure 3D of the patent in suit shows a knitted fabric and the reference to the difference between weft knitting (“Stricken”) and warp knitting (“Wirken”) do not hold water. The patent in suit does not make such a distinction, and whether the knitted fabric shown in Figure 3D is recognizable as knitted and not as warp knitted is irrelevant, since nothing more can be deduced from this than that the upper according to the invention can in any case also be knitted.

15 b) The textile upper according to the patent consists of machine-processed yarns which contain first and second fibers or filaments (feature 3), which are designated by the generic term strands (hereinafter for simplification as fibers) (para. 28) and are bonded together in a fused area by utilizing the thermoplastic properties of the polymers used for the first fiber (feature 4) (feature 5.1). In this case, the first fibers have two different thermoplastic materials that have different melting temperatures (features 4.1 and 4.2); they can be formed as a fiber core and sheath. Depending on the desired design of the textile upper, melting of only the outer material or, if a higher degree of bonding is required, of both polymer materials may be indicated. Accordingly, fibers with various combinations of thermoplastic polymer materials can be used within the scope of the invention (para. 45). Compared to non-bonded areas, bonded areas have greater stiffness, elongation strength, abrasion resistance, and durability, and therefore may provide improved support and stability of the shoe (paras. 35, 42).

16 II. The Patent Court gave the following main reasons for its decision, insofar as it is of interest for the appeal proceedings.

17 The subject matter of patent claim 1 was suggested by German Interpretative Document 1 084 173 (K11). The skilled person, a technical college engineer specializing in leather processing and shoe technology with several years of experience in the manufacture and development of shoes, who would consult a technical college engineer specializing in textile technology if necessary, would refer to K11 despite the age of the printed document. Even if short development times were the rule in the manufacture of footwear, development in this field had not stagnated for a long time. The need to use materials other than leather for the upper material was not only due to a

development limited to a lack of leather in the post-war period. Rather, a trend towards textile uppers has been evident in recent decades, particularly in sports shoes; for example, there is a demand for stable yet lightweight shoes in jogging shoes. For the skilled person, there was therefore sufficient reason to look at the older state of the art. At the time of priority, he was aware of the various textiles that could be used for the manufacture of shoe uppers and their properties. The decision to use a suitable textile material, for example knitted, because it was particularly stable or particularly elastic, was therefore a skilled person selection.

18 The textile upper part of the K11 is formed by weaving or knitting from machine-processed yarns (Sp. 1, Z. 20). It is a mixed fabric made of textile and PVC fibers. The upper part of the shoe has a glued area; on parts which are used, for example, for the heel or toe cap, it is subjected to a heat treatment in localized areas, whereby a corresponding hardening is achieved (Sp. 1, lines 11-17). Thereafter, the weft and warp threads fuse thermoplastically with each other, whereby it is possible that both the weft and the warp thread or only one of the two threads is thermoplastic and a solid fabric is produced by fusion and subsequent hardening with the other threads. This is in accordance with the features of the patent in suit, according to which the bonded area is formed at least in part from first and second fibers bonded together. Since only certain parts or areas are bonded, a non-bonded area is inevitably also produced. The disadvantage of the state of the art pointed out in the document (column 1, lines 18-24), namely that the adhesive threads would have to be laboriously introduced at certain points in the textile, suggests that the threads described should also be used at points not to be reinforced and that the fibers should only be bonded at the points to be reinforced. Finally, the citation gives the indication (column 1, lines 49-55) that the textile material should first be cut to size and then it should be determined which areas need to be reinforced because they are to serve, for example, as heel or toe parts.

19 According to all this, the shoe according to the invention differs from the object of K11 only by the use of a second thermoplastic material with a second melting temperature. However, since K11 discloses that the shoe upper is made of mixed yarns with PVC fibers and textile fibers, and the skilled person knows

the various textile fibers and their advantages and disadvantages, it cannot be considered inventive to select suitable thermoplastic fibers therefrom. Since the PVC fibers act as melt-adhesive fibers and the remaining fibers should usually retain their existing structure, it is obvious to select the second thermoplastic material with a second, higher melting temperature. Also, its use for the first fibers would not lead to patentable subject matter in view of the known mixed filaments.

20 The subject matter of claims 14 and 26 was also suggested by K11 in conjunction with US patent 2 314 098 (K16). The skilled person would recognize that only three possibilities were available for bonding certain defined areas, namely providing the entire upper part with fusible fibers and then subjecting the defined areas to a heat treatment or providing only the defined areas with fusible fibers and then subjecting the entire upper part or only the defined areas to a heat treatment. The first two methods were described in K11, the third method was disclosed in K16 (K16, p. 1 right column, lines 40-49 in connection with p. 2 left column, lines 10-17). According to the citation, only certain areas of the upper were heated in order to avoid losing the flexibility and softness of the other parts. This was due to the fact that the upper part was partly made of elastic fibers, the elasticity of which was reduced by the heat treatment. The skilled person would easily recognize that heat treatment of the entire upper part is possible if it is made of fiber material which is not damaged by heat treatment. The heat treatment of the entire upper part for bonding certain areas is also less costly, since a tool adapted to these areas is required for the targeted heating of certain areas. Selecting from the three options mentioned was purely a matter of skilled person judgment.

21 The versions of the patent in suit defended by the auxiliary requests were also not based on inventive step.

22 III. This assessment stands up to review in the appeal proceedings.

23 1. The subject matter of the patent in suit defended by the main request is obvious to the skilled person by citation K11 and US patent 2 440 393 (K17) (Art. 56 EPC).

24 a) Without success, the appeal criticizes the Patent Court's definition of the skilled person as erroneous.

25 The Patent Court defined the skilled person as a technical college engineer specializing in leather processing and footwear technology with several years of experience in the manufacture and development of footwear. The appeal rightly does not object to this.

26 As far as the Patent Court assumed that this skilled person consults, if necessary, an engineer from a university of applied sciences specializing in textile technology, this is also not objectionable. Because the Patent Court did not doubt that the consultation of this second skilled person cannot be assumed without further ado, but requires justification in the individual case. Since, as the appeal does not question, textiles were frequently used for shoe uppers at the time of priority, such a justification cannot be excluded from the outset.

27 b) The Patent Court rightly used K11 as a starting point for the assessment of inventive step. Contrary to the view of the defendant, the skilled person had reason to consider this citation. The fact that the filing date of the citation was almost fifty years ago at the time of priority does not contradict this.

28 aa) According to the established case law of the Federal Court of Justice, whether a certain state of the art presented itself to the skilled person as a possible starting point for his efforts does not depend on whether it is the closest state of the art. The classification of a certain starting point as the closest state of the art from an ex post point of view is neither sufficient (Federal Court of Justice, judgment of 16 December 2008 X ZR 89/07, BGHZ 179, 168 = GRUR 2009, 382 marginal no. 51 Olanzapin) nor necessary (Federal Court of Justice, judgment of 18 June 2009 Xa ZR 138/05, GRUR 2009, 1039 marginal no. 20 Fischbissanzeiger). The choice of starting point therefore requires justification, which generally lies in the effort of the skilled person to find a better or different solution for a specific purpose than the state of the art makes available (BGHZ 179, 168 Olanzapin; Federal Court of Justice, judgment of 5 October 2016 X ZR 78/14, GRUR 2017, 148 marginal no. 42 et seq. Opto-Baulement).

29 bb) In this context, the age of a specific citation is only one of several

criteria that can be considered relevant. According to the case law of the Federal Court of Justice, it is a question of the individual case, the circumstances of which must be comprehensively assessed, whether a stagnation of the state of the art over a long period of time indicates that the new invention was not suggested to the skilled person by the state of the art (Federal Court of Justice, judgment of 29 June 2010 X ZR 49/09, GRUR 2010, 992 marginal no. 28 Ziehmaschinenzugeinheit II). Likewise, it is a question of the individual case whether, in addition to current technical solutions, which the skilled person will generally examine without further ado for their suitability as a starting point for further development, older solutions are also to be considered for this purpose. The circumstances to be considered may include the development cycles in the field in question as well as the dependence of product development on non-technical factors such as current fashion trends to be taken into account in the clothing and shoe industry. However, it also cannot be disregarded that the considerations to be made to justify the starting point chosen by the skilled person only concern an auxiliary criterion in the assessment of the question whether the technical teaching of the invention is based on inventive step. If a technical solution which has been known for many years and which already contains the essential elements of the invention were to remain unnoticed on the grounds that the skilled person would not have considered the approach to the solution because of the time lag, it would not be a new and inventive contribution to the state of the art which would be honored with an industrial property right, but the mere "rediscovery" of a known technical concept would be rewarded. In such cases, therefore, a particularly careful examination is required to determine whether the older solution actually lies outside the area in which, from a skilled person's point of view, possible starting points for solving the technical problem could be found on the priority date.

30 cc) In the case in dispute, K11 constituted such a possible starting point.

31 (1) Both parties active in the field of sporting goods manufacturing agree that the development cycles for footwear, in particular sports footwear, are relatively short and that footwear development and manufacturing is a fast-moving economic sector. Contrary to the view of the defendant, however, this

does not mean that further development takes place constantly, quickly and in only one technical direction and that for the skilled person a recourse to an older technology or a technology that has not been used for a longer period of time is basically out of the question. First of all, the finding of the Patent Court, which is not challenged in a substantiated manner and in principle agrees with the description of the patent in suit, that especially in the field of sports shoes a trend towards stable and nevertheless light shoes with textile upper materials can be recognized in the last decades, speaks against this. Moreover, as the plaintiff correctly points out, shoes and sporting goods are subject to fashion trends, which is why innovations are only partly due to technical developments alone. Thus, the defendant does not deny that sporting goods manufacturers, in order to create a "retro look", may, if necessary, resort to optical stylistic devices from the past. Accordingly, the skilled person has reason to consider older solutions for their technical realization when a certain design or material "returns".

32 (2) As also indicated in the patent specification, the application of reinforcing and stiffening elements made of material other than the textile used for the shoe upper, which was widespread at the time of priority, appeared to the skilled person to be technically complicated to manufacture and therefore disadvantageous. It may be that the skilled person was primarily concerned to look for less costly solutions within this line of development. However, the skilled person also had reason to examine whether other approaches to reducing this effort could be found in the state of the art in shoe manufacturing technology. The skilled person found such an approach in K11, which teaches the reinforcement and stiffening of a textile shoe upper by stiffening the textile itself.

33 (3) The point of view emphasized by the appellant that it was not obvious at the time of priority to consider a knitted upper to be sufficiently strong and thus suitable for the manufacture of footwear and in particular sports footwear is not relevant in this context. In order to consider citation K11, the skilled person did not have to start from a knitted upper, but could take as a basis a textile fabric as it was widely used at the time of priority.

34 c) The subject matter of claim 1, the features of which are disclosed in K11 with the exception of feature 4.2 [1.8], is suggested by the citation.

35 aa) K11 refers to a shoe upper made of a blended fabric or blended knitted fabric with threads of textile and polyvinyl chloride fibers and stiffened at selectable points by heat treatment. The paper explains that and in what way thermoplastic threads contribute to a hardening of the woven or knitted fabric, namely by fusion of weft and warp threads and subsequent hardening (Sp. 1, lines 11-17). The paper sees the disadvantage of this technique, which was already known at that time, in the fact that the proportion of PVC fibers in the areas to be hardened must be taken into account. It is therefore suggested not to use yarns with different compositions, but to carry out the blending in the yarn itself and to use the PVC portion for heat treatment at the desired places only after cutting the fabric (Sp. 1, lines 32-54).

36 bb) Thus, bonding within the meaning of the patent in suit is disclosed because, as the Patent Court correctly assumed, the fusing produces a bond between the fibers which leads to a hardening and consolidation of the areas of the textile material thus treated. The hardening is achieved by "carrying out a heat treatment known per se in localized areas" (Sp. 1, lines 51-54). "Heat treatment" and "thermoplastic fastening" are also equated in the description of an embodiment in which a cotton fabric is arranged on the inner side of the heel part (Sp. 2, Z. 18-25). Thus, contrary to the opinion of the appeal, the writing does not distinguish between heating to a temperature below the melting point (= heat treatment) and fusing in the narrower sense. It simultaneously discloses a bonding of only certain parts or areas of the textile upper. As a result, there are also non-bonded areas in which the fibers are not (partially) melted and consequently not bonded to each other. The hardening brought about by the heat treatment is used in particular to strengthen the toe and heel areas of the shoe and is intended to provide stability to the shoe upper without the possible need to incorporate additional reinforcing components (Sp. 1, lines 49-54). The assumption of the appeal that the heat treatment always refers to the entire shoe upper finds no basis in the citation.

37 cc) According to feature 4.2 [1.8], which is not disclosed in the citation, the first fibers are formed not only from one, but from a first and a second thermoplastic material, each with different melting temperatures. According to citation K11, however, mixed fibers consisting of textile threads and polyvinyl

chloride fibers were already known. In this respect, it is stated in the document that, according to the invention, the mixing with the thermoplastic material does not take place in the woven or knitted fabric, but in the yarn itself (Sp. 1, lines 38-42). Thus, K11 basically teaches mixing "in the fiber" (so explicitly Sp. 1, Z. 42). As the Patent Court found unchallenged, the skilled person was basically familiar with the properties of textile fibers and thermoplastic fibers. Moreover, he had reason to consult a better qualified skilled person for the processing of synthetic fibers if he did not have a sufficient overview of the possibilities of designing thermoplastic fibers. Since the K11 teaches him to put the thread together in such a way that different properties are imparted to it at different points by the heat treatment, he was thus in principle given the way to further increase the possibility of differentiation by using two different thermoplastics for one thread, if this appeared to him to be useful for improving the properties of the shoe or with regard to an expedient manufacturing process. This assumption is not contradicted by the defendant's argument that K11 strives for increased elasticity especially for use for medical purposes (Sp. 3, Z. 1-4). For since the heat treatment is in any case carried out at selectable (Sp. 1, Z. 35) and locally limited points (Sp. 1, Z. 51, 52), so that there are also non-thermoplastic fused or non-stiffened areas on the shoe upper which ensure the necessary elasticity, on the contrary, two thermoplastics recognizably improve the possibility of going no further than necessary in the stiffening. In this context, the question discussed by the Patent Court as to whether it was obvious to the skilled person to replace the blended fabric of K11 by two thermoplastic materials is irrelevant, since the patent claim does not contain any statement on the material of the second fibers.

38 dd) For the use of stiffened fabric with two different thermoplastic fibers, which is also used for the manufacture of shoes, there is furthermore an example from the German published application 2 018 762 (K22). There, a fabric is described in which the or a considerable number of the threads of the fabric consist of a first film-forming polymer and a second polymer incorporated therein, and in which the first polymer has a lower melting point than the second (K22, p. 2, 2nd par.; p. 8, 3rd par. and p. 12, 1st par. for use in footwear).

39 d) The defended patent claim 14 relates to a process for the

manufacture of an article of footwear according to subject claim 1. Nothing else applies to patentability in this respect.

40 e) The method according to patent claim 26 is obvious for the reasons given by the Patent Court, but also by citations K11 and K17.

41 aa) The subject matter of patent claim 26 differs, as the Patent Court correctly assumed and without objection by the parties, from the subject matter of K11 by the teaching of arranging a fusible fiber only in selected areas of the knitted upper and heating the entire upper to bond the fusible fiber in the selected areas to an adjacent fiber.

42 bb) As mentioned in citation K11, it was already known to incorporate thermoplastic yarns into a woven or knitted fabric for a shoe upper (Sp. 1, lines 11-17), the incorporation taking place at precisely determined locations which are subsequently cured (Sp. 1, lines 21, 22). It is then merely a question of expediency whether only these places are heated or, for practical reasons, the entire upper part, where this heating has no undesirable consequences in the areas without thermoplastic material. It is true that the appeal correctly points out that K11 considers the incorporation of thermoplastic material only in certain areas of the shoe upper to be disadvantageous. Notwithstanding this, however, it presents this alternative to the skilled person.

43 cc) Incidentally, such a process is also suggested by K17. The citation relates to a process for the manufacture of a last-adapted shoe upper made of a textile material which is resilient and maintains or retains the contour of the last during wear (Sp. 1, lines 1-7). A yarn with a thermoplastic material is incorporated into the shoe upper (Sp. 2, Z. 18-21). In the shoe upper, there are also non-reinforced sections that do not contain thermoplastic fiber (Sp. 4, Z. 43-48). The entire upper is subjected to heat treatment, such as being placed in a steam bath, to soften the thermoplastic elements and then allow them to contract (Sp. 4, Z. 4-11). The transverse fibers melt or adhere to the longitudinal PVC fibers, anchoring them in the fabric (Sp. 2, lines 26-29). Appellant's argument, directed against the use of K17, that K17 is concerned solely with maintaining the shape of the shoe, is unavailing. Maintaining the shape of a shoe means nothing other than maintaining its stability. The preservation and

increase of stability, together with the achievement of increased durability, is described as an advantage of the invention according to the patent in suit (para. 11).

44 2. The subject matter of the patent in suit defended by auxiliary claims I to VIII is also suggested by the state of the art.

45 a) This applies first to auxiliary request I.

46 aa) Claims 1, 2 and 3 of auxiliary request I are based on claims 1, 14 and 26 of the restricted version. Patent claim 1 in this version shall read as follows (additionally inserted features are underlined):

> "1. An article of athletic footwear (100), comprising a sole structure (110) and a knitted upper (120) attached to the sole structure,
>
> said knitted upper being formed substantially of a textile forming at least an outer portion of said knitted upper, said textile comprising:
>
> bonded regions (132-136) of the textile (130), the bonded regions being formed at least in part of a plurality of first strands and a plurality of second strands, the first strands being formed of a first thermoplastic polymeric material and the first strands being bonded to the second strands in the bonded region; and a plurality of non-bonded regions (131) of the textile, the first strands not being bonded to the second strands in the non-bonded region,
>
> wherein a bonded region (133) is disposed at a heel portion of the upper (120) so as to extend around the heel portion to effectively encircle the heel of the wearer, and
>
> a bonded region (134) is disposed on one side of the upper (120) as an elongated strip such that the bonded region extends horizontally or longitudinally on the lateral side of the upper (120), and
>
> a bonded region (136) is arranged at a chucking portion of the upper member (120) so as to extend at the medial edge (124a) and the lateral edge (124b) and to include openings (123), and
>
> a bonded region (135) is disposed at a toe portion of the upper (120),
>
> wherein the textile comprises a lacing system including a lace (122) and the lace (122) is threaded through the openings (123) and across a space formed between the medial edge (123a) and the lateral edge (124b),
>
> wherein the textile (130) is formed from machine processed yarns

(146), the first strands and the second strands being received within the yarns, and

wherein the first thermoplastic polymeric material (144) has a first melting temperature and wherein the first strands of the textile (130) comprise a second thermoplastic material (145) having a second melting temperature,

such that stability is imparted to the top by the bonded portions of the textile without the need to incorporate additional components."

47 bb) The features included in the claims according to auxiliary request I do not establish inventive step.

48 (1) This applies first of all insofar as they limit the subject matter of the invention to a sports shoe. The patent in suit is based on the assumption that the use of textile materials was also customary, in particular for sports shoes. Insofar as the appeal claims that the invention makes it possible for the first time to use knitted uppers even in the high-performance segment, this is not expressed in the defended patent claim 1, nor is it apparent how such a delimitation could be formulated. Consequently, the application of the suggested textile upper and the process for its manufacture to a sports shoe cannot establish an inventive step.

49 (2) On the other hand, the additional features specify at which places and in which way certain bonded textile areas are arranged or are to be arranged on the (sports) shoe upper, e.g. around the heel and the toe area, as horizontal and longitudinal strips on the side of the upper or on the instep section of the upper. These are different areas of a shoe upper which are usually reinforced and have also been reinforced by other materials in that state of the art from which the patent in suit starts. As the Patent Court correctly assumed, based on K11, it is in accordance with skilled person craftsmanship to reinforce the shoe upper in those areas in which a particular strength of the material and an associated higher stability of the shoe is required or desired. Moreover, as the plaintiff correctly points out, the arrangement of bonded areas in the toe and heel areas of a shoe upper is known from K11 (Sp. 1, lines 49-54 and claim 3), as is the stiffening of edges and the formation of eyelets which, according to common understanding, are intended to be suitable for receiving a shoelace. The provision of a bonded area on one side of a shoe upper is disclosed in U.S. Patent P3 (Sp. 2, lines 12-18) and K8 (Sp. 4, lines 48-54), as the plaintiff argues.

50 (3) As regards the method for manufacturing a knitted upper for a sports shoe which is protected in patent claim 3 according to auxiliary claim I, the features added with regard to the arrangement of bonded areas from citations K16 (Sp. 1, Z. 55 - Sp. 2, Z. 8 reinforcement of the heel area) and the US patent specification 2 343 390 (K12), which relates to the manufacture of shoes and in particular methods for stiffening selected parts of shoes (sp. 1, lines 1-3, figure 4 reinforcement in the heel and toe area, provision of a lacing system with eyelets).

51 (4) Insofar as the defendant believes that the bonded areas at various points on the upper part of the sports shoe are interrelated and form a technical unit that is not suggested by their combination, this cannot be accepted. It may well be that, as the appeal states, the combination of the bonded areas and in particular their arrangement on the side of the shoe and in the area of the instep are of particular importance for use as a sports shoe, because the lateral bonds provide additional support and the bonded areas on the instep enable optimum force distribution of the lacing system, with the lateral bonds in turn favoring the distribution of the tensile forces. Nevertheless, these are skilled person derivations from the requirement to stiffen a shoe with a textile upper at those points that are important for stability while at the same time providing the highest possible wearing comfort; stiffeners at these points were accordingly known to the skilled person as such (see only the corresponding material reinforcements in citation P3).

52 b) No patentable subject matter results from auxiliary claims II to VIII either.

53 The claim according to auxiliary request II is identical to patent claim 26 of the main request.

54 The only (process) claim under auxiliary claim III limits the claim under auxiliary claim II in that bonded areas are arranged on a heel portion on one side and on a toe portion of the upper. This design, which essentially corresponds to that under claim 3 of auxiliary claim I, is also not based on inventive step for the reasons explained.

55 The sole claim according to auxiliary claim IV corresponds to process claim 26 according to the main claim with the as explained suggested - additional feature that a first meltable fiber comprises a first thermoplastic polymer having a first melting temperature and a second thermoplastic polymer having a second melting temperature.

56 The sole claim under Auxiliary Claim V corresponds to the claim under Auxiliary Claim IV with the limitation to an athletic shoe discussed above.

57 The claim according to auxiliary claim VI corresponds to the patent claim according to auxiliary claim III with the additional feature that different temperatures are applied to obtain different degrees of bonding of the bonded areas. As the Patent Court correctly found and without objection by the defendant, it is known to the skilled person that different degrees of bonding and thus different strengths are obtained by applying different temperatures, since the strength increases with the proportion of molten material and the associated increase in the bonded area. If two polymers with different melting points are to be softened, at least partially, the application of different temperatures is required anyway.

58 The claim according to auxiliary claim VII is identical to the claim according to auxiliary claim III with the limitation to a sports shoe. The claim according to auxiliary claim VIII is identical to patent claim 3 according to auxiliary claim I.

59 IV. The decision on costs is based on Sec. 121(2) Patent Act and Sec. 97(1) Code of Civil Procedure.

Judge at the Federal Court of Justice Gröning is unable to sign due to absence on vacation

Meier-Beck Meier-Beck Bacher

Schuster Kober-Dehm

Previous instance:
Federal Patent Court, judgment of 13 November 2014 – 2 Ni 45/12 (EP) –