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(54) **SAW BLADE HAVING A SMALL SAW TOOTH**

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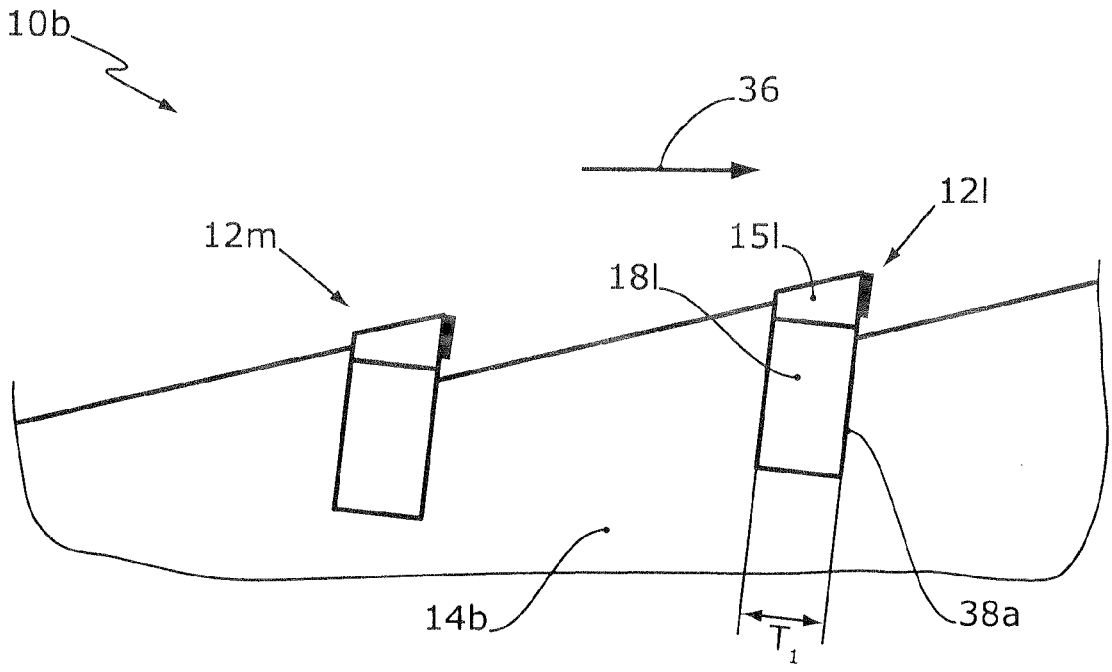
(57) **ABSTRACT**

A saw tooth for a saw blade that is attached in a longitudinal direction thereof on the saw blade body to extend away, at least in part, from the saw blade body. The saw tooth is formed with a cutting-face part having a cutting face, a height of which extends in the longitudinal direction and a width of which extends perpendicularly to the longitudinal direction. The width of the cutting face is greater than a height of the cutting face.



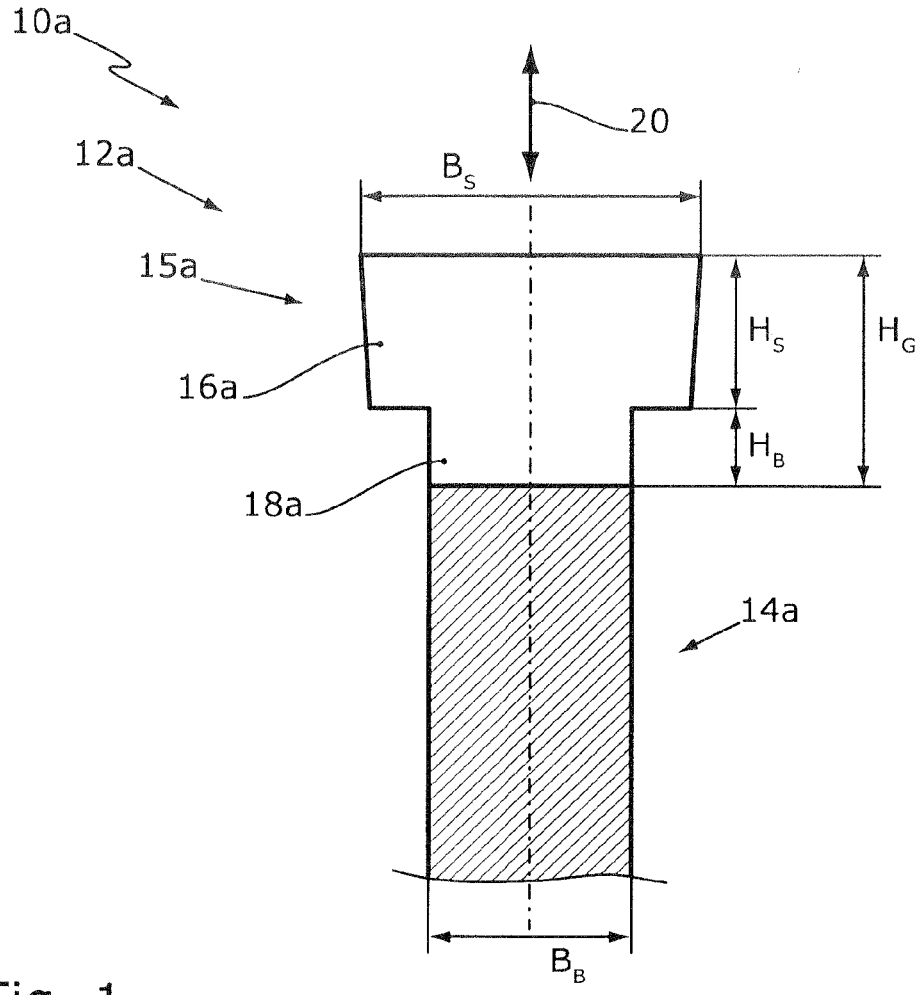


Fig. 1

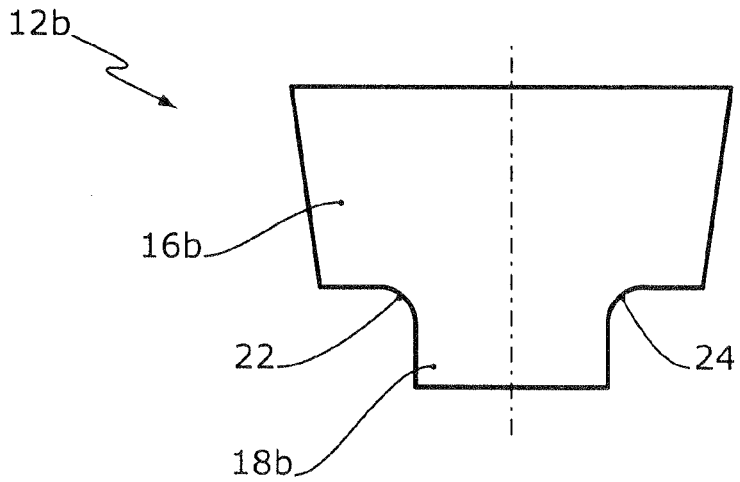


Fig. 2

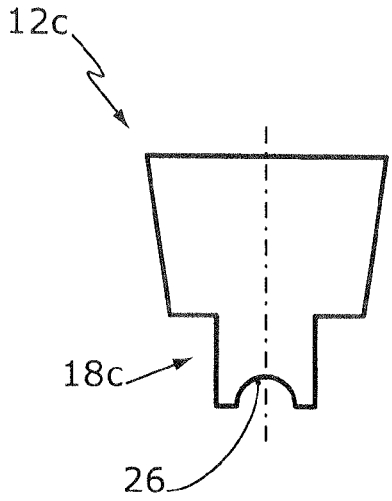


Fig. 3

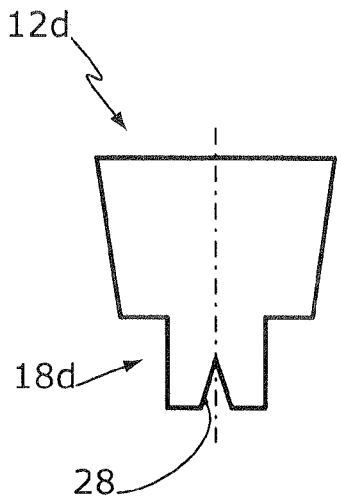


Fig. 4

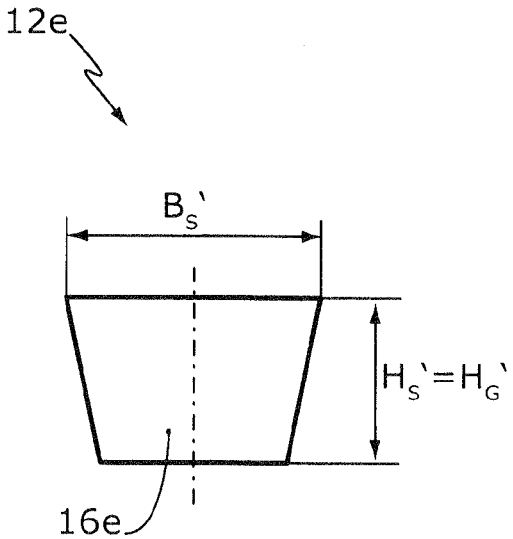


Fig. 5

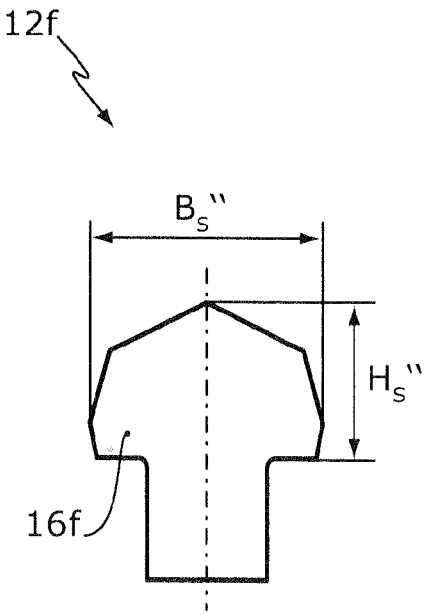


Fig. 6

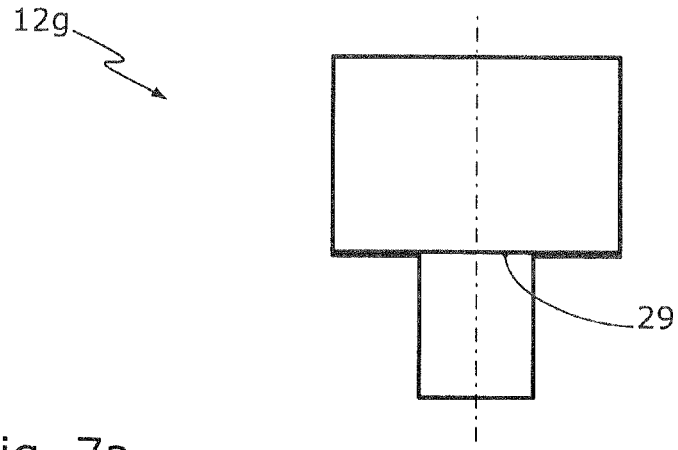


Fig. 7a

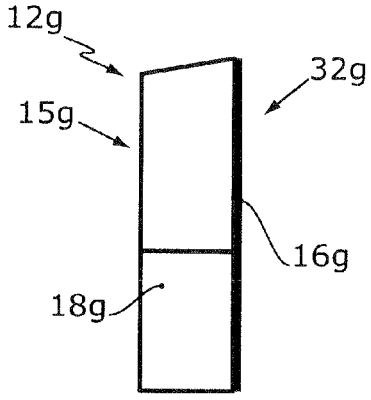


Fig. 7b

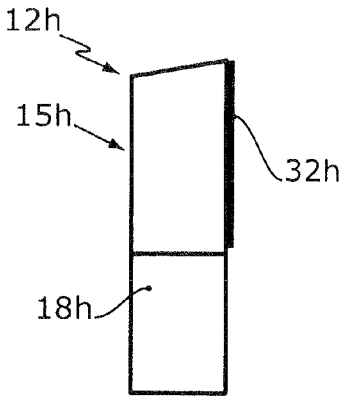


Fig. 7c

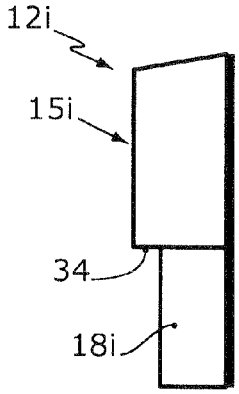


Fig. 7d

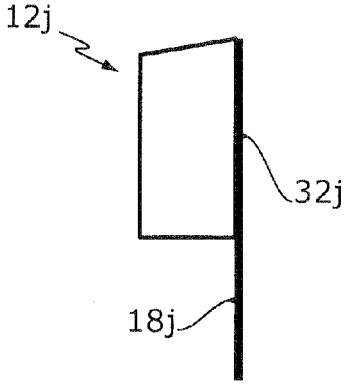


Fig. 7e

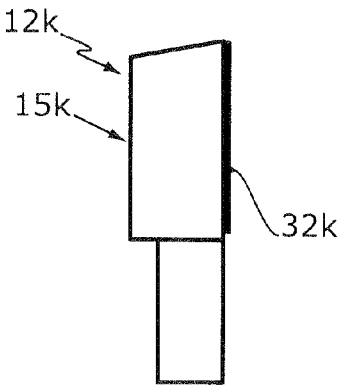


Fig. 7f

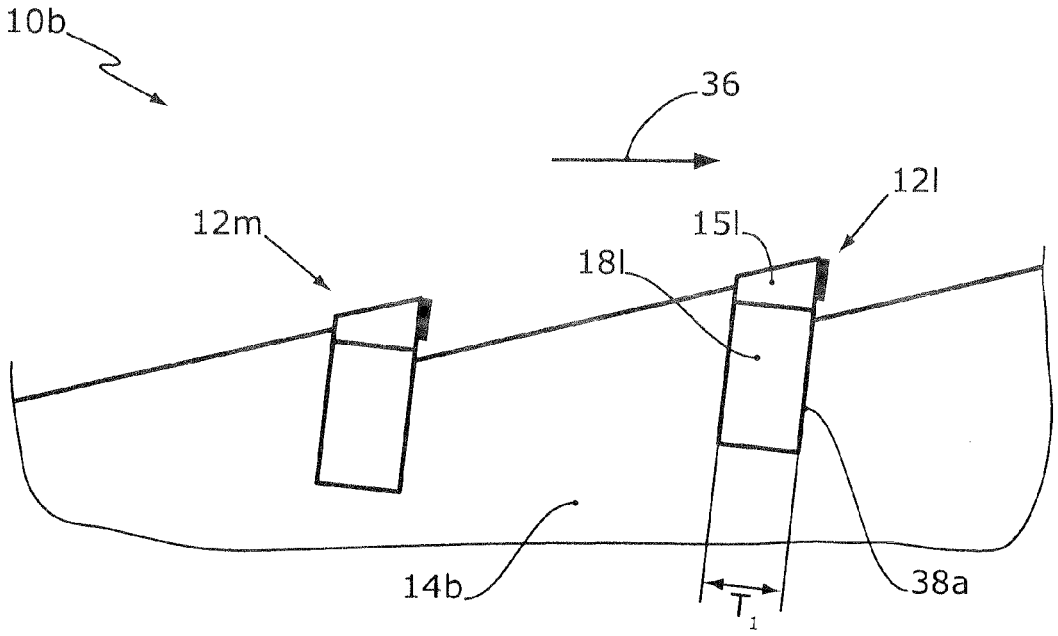


Fig. 8a

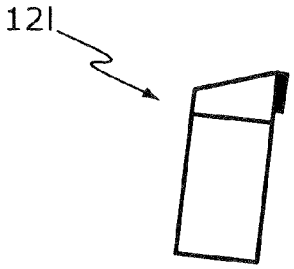


Fig. 8b

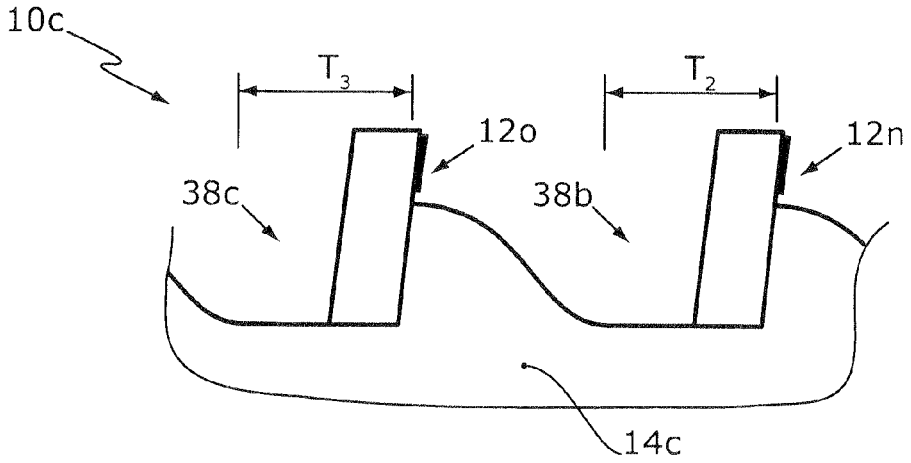


Fig. 9

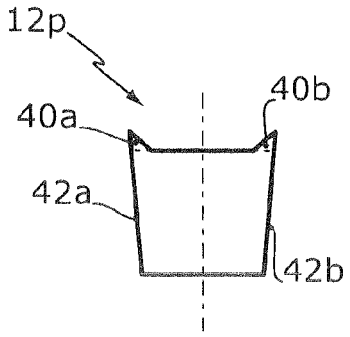


Fig. 10a

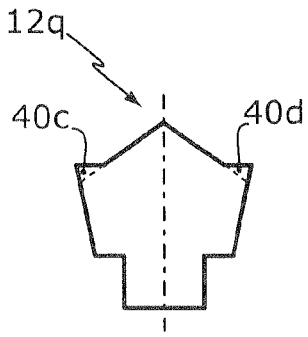


Fig. 10b

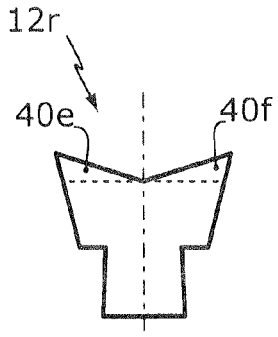


Fig. 10c

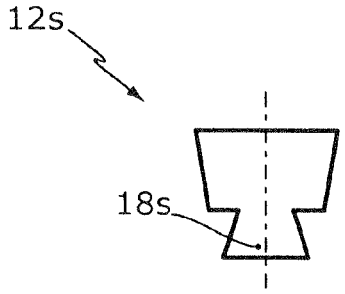


Fig. 11a

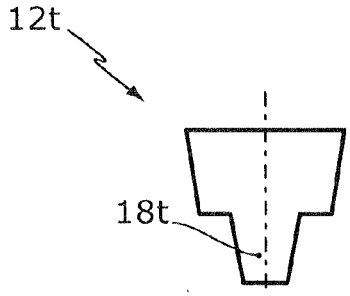


Fig. 11b

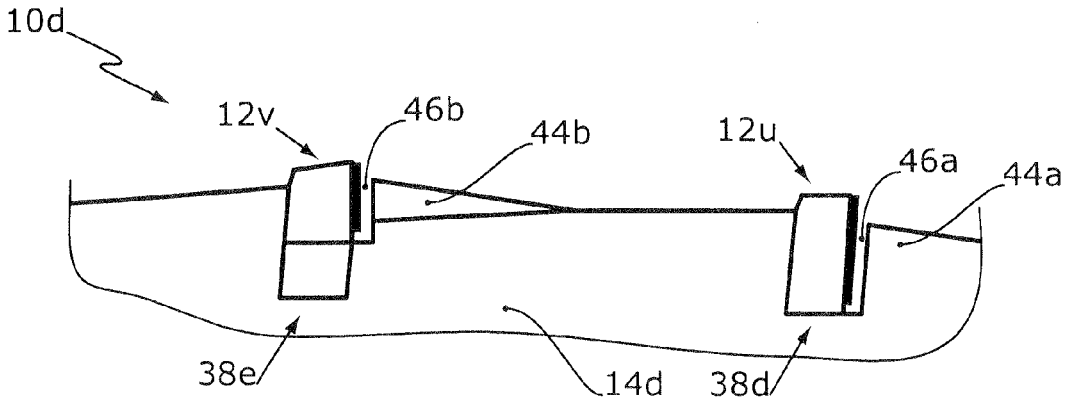


Fig. 12

SAW BLADE HAVING A SMALL SAW TOOTH

CROSS-REFERENCE TO A RELATED APPLICATION

[0001] The invention described and claimed hereinbelow is also described in German Priority Document DE 20 2013 102690.5, filed on Jun. 21, 2013. The German Priority Document, the subject matter of which is incorporated herein by reference, provides the basis for a claim of priority of invention under 35 U.S.C. 119(a)-(d).

BACKGROUND OF THE INVENTION

[0002] The invention relates to a saw tooth for a saw blade that is attached in the longitudinal direction thereof on the saw blade body so as to extend away, at least in part, from a saw blade body of the saw blade. The inventive saw tooth comprises a cutting-face part having a cutting face, the height of which extends in the longitudinal direction and the width of which extends perpendicularly to the longitudinal direction.

[0003] It is known to equip saw blade bodies of saw blades with saw teeth. After thusly equipping the saw blade body, it is necessary to perform sharpening-, laser-, and/or erosion processing in order to impart the final shape and sharpness to the saw teeth. In order to permit this processing to be carried out in a short period of time, it is advantageous to design the saw teeth to be as small as possible.

[0004] Small saw teeth have the further advantage of being relatively quiet, in particular in the case of rapidly rotating circular saw blades. Furthermore, small saw teeth have greater stability against lateral deflection and axial oscillating motions, thereby making it possible to improve cutting quality and extend the downtime of the saw blade.

[0005] Finally, saw teeth are often provided with expensive coatings, in particular diamond-based coatings. A small amount of coating material is used in the production of small saw teeth, thereby enabling the saw teeth to be produced in a low-cost manner.

[0006] With small saw teeth, however, there is a risk that the saw teeth will not be adequately adhered to the saw blade body, since there is only a small connection surface available between the individual saw teeth and the saw blade body, and the stability of the connection greatly depends on the size of the connection surface.

SUMMARY OF THE INVENTION

[0007] The present invention overcomes the shortcomings of known arts, such as those mentioned above.

[0008] To that end, the present invention provides a saw tooth and a saw blade that permit a good connection to be established between the saw tooth and the saw blade body even in the case of small dimensions of the saw tooth.

[0009] In an embodiment, the invention provides a saw blade that is attached in the longitudinal direction thereof on the saw blade body so as to extend away, at least in part, from a saw blade body of the saw blade. The saw tooth comprises a cutting-face part having a cutting face, the height of which extends in the longitudinal direction and the width of which extends perpendicularly to the longitudinal direction. The width of the cutting face is greater than the height of the cutting face.

[0010] Given that the height is less than the width, the leverage acting on the saw tooth is low. The saw tooth is securely attached to the saw blade, therefore.

[0011] In an embodiment, the saw tooth has an attachment projection which extends away from the cutting face in the longitudinal direction. The attachment projection is fixedly anchored on the saw blade body, thereby making it possible to produce a very stable connection of the saw tooth to the saw blade. The attachment projection also may be referred to as an "extension", while the cutting-face part having the cutting face is the "working part" of the saw tooth.

[0012] The attachment projection is designed having any length in the longitudinal direction. The attachment projection may be larger in the longitudinal direction than in the width. Preferably, the attachment projection is larger in the longitudinal direction than in the height of the cutting face. As a result, the leverage acting on the cutting tooth can be well compensated for.

[0013] The width of the attachment projection may be smaller than the width of the cutting face. The result thereof is an attachment projection of the saw tooth having the overall shape of a peg. Such an attachment projection is inserted into an attachment recess of the saw blade.

[0014] The saw tooth has a thickness extending perpendicularly to the height of the cutting face and perpendicularly to the width of the cutting face. The thickness of the cutting-face part corresponds to the thickness of the attachment projection. In other words, the saw tooth has a uniform thickness as viewed in the cutting direction. The saw tooth is therefore particularly easy to produce.

[0015] Alternatively, the thickness of the cutting-face part may be greater than the thickness of the attachment projection. As a result, a stop is formed between the attachment projection and the cutting-face part of the saw tooth, up to which the saw tooth can be inserted into an attachment recess of the saw blade. During sawing, the saw tooth is supported against the saw blade body by a stop.

[0016] At least one transition between the cutting-face part and the attachment projection is rounded. By such rounding, it is possible to prevent an unwanted notch effect and, therefore, prevent the risk of crack formation. The rounding is preferably provided on one side of the saw tooth, the surface of which is perpendicular to the cutting face.

[0017] Preferably, all transitions between the cutting-face part and the attachment projection are rounded. It is thereby possible to prevent a notch effect and crack formation in a particularly effective manner.

[0018] According to an embodiment, the cutting face comprises a coating, the hardness of which is greater than the hardness of the remaining cutting-face part. For example, the cutting face can comprise a diamond layer and a cutting-face part, except for the cutting face, made of hard metal. The coating is preferably made of poly-crystalline diamond (PCD). The hardness of the coating is preferably greater than the hardness of the remainder of the saw tooth. The coating can have any thickness.

[0019] The attachment projection also may at least partially comprise the coating. The attachment projection preferably does not have a coating, however, in order to permit a thoroughly wetting soldered joint to be established between the saw tooth and the saw blade body. If the attachment projection does not have a coating, it can be wetted with solder on the back side and on the underside and on the front side. The result thereof is a very strong connection between the saw tooth and the saw blade body. The coating can be removed by sharpening, laser processing or another suitable method.

[0020] In an embodiment, the saw tooth has a positioning recess and/or a positioning projection. The positioning recess and/or the positioning projection are formed on the attachment projection. By use of the positioning recess and the positioning projection, the saw tooth is easily connected to the saw blade body in an exact position. The positioning recess comprises beveled notches, slants, radii and/or other geometrical shapes.

[0021] The invention also relates to a saw blade comprising a saw blade body and at least one above-described saw tooth, wherein the saw tooth is attached in a saw tooth receptacle of the saw blade body. Preferably, a plurality of above-described saw teeth is attached to the saw blade body. The saw teeth may be distributed regularly or irregularly along a tooth-support region of the saw blade body. The saw tooth is preferably attached to the saw blade body by a clamped, bonded, soldered and/or welded connection.

[0022] The saw tooth receptacle may have a position projection that corresponds to the positioning recess and/or a position recess that corresponds to the positioning projection in order to allow the saw tooth to be oriented exactly relative to the saw blade body upon assembly.

[0023] According to an embodiment, the depth of the saw tooth receptacle in the cutting direction of the saw blade corresponds to the thickness of the cutting-face part and/or the thickness of the attachment projection. As a result, the saw tooth is fitted into the saw blade body as viewed in the cutting direction. The saw tooth is attached securely to the saw blade body by the contact on the front side and the back side of the saw tooth (both as viewed in the cutting direction) with the saw blade body. In addition, the saw tooth is attached to the saw blade body using a soldered, bonded and/or welded connection in order to obtain a very strong connection between the saw tooth and the saw blade body.

[0024] The depth of the saw tooth receptacle of the saw blade body in the cutting direction of the saw blade is greater than the thickness of the cutting-face part, however. This enables creating a chip space behind the saw tooth back, as viewed in the cutting direction. The front side of the saw tooth opposite the saw tooth back is thereby used, at least partially, as a surface for connection to the saw blade body. As an alternative, the saw tooth back is connected to the saw blade body, thereby producing a chip space in front of the front side of the saw tooth.

[0025] The saw blade is designed in the shape of a circular saw blade, an endless saw blade, a disk-shaped milling cutter, or a hacksaw blade.

BRIEF DESCRIPTION OF THE DRAWINGS

[0026] Further features and advantages of the invention will become apparent from the description of embodiments that follows, with reference to the attached figures, wherein:

[0027] FIG. **1** presents a section of a front view of a first saw blade having a first saw tooth;

[0028] FIG. **2** presents a front view of a second saw tooth;

[0029] FIG. **3** presents a front view of a third saw tooth;

[0030] FIG. **4** presents a front view of a fourth saw tooth;

[0031] FIG. **5** presents a front view of a fifth saw tooth;

[0032] FIG. **6** presents a front view of a sixth saw tooth;

[0033] FIG. **7***a* presents a front view of a seventh saw tooth;

[0034] FIG. **7***b* presents a side view of the seventh saw tooth;

[0035] FIG. **7***c* presents a side view of an eighth saw tooth;

[0036] FIG. **7***d* presents a side view of a ninth saw tooth;

[0037] FIG. **7***e* presents a side view of a tenth saw tooth;

[0038] FIG. **7***f* presents a side view of an eleventh saw tooth;

[0039] FIG. **8***a* presents a section of a side view of a second saw blade having a twelfth saw tooth and a thirteenth saw tooth;

[0040] FIG. **8***b* presents a side view of the twelfth saw tooth, alone;

[0041] FIG. **9** presents a section of a side view of a third saw blade having a fourteenth saw tooth and a fifteenth saw tooth;

[0042] FIG. **10***a* presents a front view of a sixteenth saw tooth;

[0043] FIG. **10***b* presents a front view of a seventeenth saw tooth;

[0044] FIG. **10***c* presents a front view of an eighteenth saw tooth;

[0045] FIG. **11***a* presents a front view of a nineteenth saw tooth;

[0046] FIG. **11***b* presents a front view of a twentieth saw tooth; and

[0047] FIG. **12** presents a section of a side view of a fourth saw blade having a twenty-first saw tooth and a twenty-second saw tooth.

DETAILED DESCRIPTION OF THE INVENTION

[0048] The following is a detailed description of example embodiments of the invention depicted in the accompanying drawings. The example embodiments are presented in such detail as to clearly communicate the invention and are designed to make such embodiments obvious to a person of ordinary skill in the art. However, the amount of detail offered is not intended to limit the anticipated variations of embodiments; on the contrary, the intention is to cover all modifications, equivalents, and alternatives falling within the spirit and scope of the present invention, as defined by the appended claims.

[0049] FIG. **1** shows a front view of a first saw blade **10***a* having a first saw tooth **12***a*. The first saw tooth **12***a* is attached to a saw blade body **14***a*. The saw blade body **14***a* is shown in an exposed view. The first saw tooth **12***a* comprises a cutting-face part **15***a* having a cutting face **16***a*. The cutting face **16***a* forms the front side of the cutting-face part **15***a*. An attachment projection **18***a* of the first saw tooth **12***a* adjoins the cutting-face part **15***a*. A double arrow **20** indicates the longitudinal direction of the first saw blade **10***a* and the first saw tooth **12***a*. The first saw tooth **12***a* extends away from the saw blade body **14***a* in the longitudinal direction.

[0050] The cutting face **16***a* has a height H_S in the longitudinal direction. Perpendicular to this height H_S, the cutting face **16***a* has a width B. The width B_S is more than twice as great as the height H_S of the cutting face **16***a*. As a result, the first saw tooth **12***a* can be securely attached to the saw blade body **14***a* without the possibility of the first saw tooth **12***a* being lifted off the saw blade body **14***a* due to leverage during sawing.

[0051] The first saw tooth **12***a* is attached to the saw blade body **14***a* on the back side of this first saw tooth, in the region of the cutting face **16***a*. The holding force of the first saw tooth **12***a* on the saw blade body **14***a* is further increased by the attachment projection **18***a*. The attachment projection **18***a* has a height H_B in the longitudinal direction and a width B_B perpendicular to the longitudinal direction. The overall height

H_G, comprising the cutting-face height H_S and the attachment projection height H_B, is less than the width B_S of the cutting face **16***a*.

[0052] The width B_B of the attachment projection **18***a* is adapted to the width of the saw blade body **14***a*. In other words, the width B_B of the attachment projection **18***a* is identical to the width of the saw blade body **14***a*.

[0053] FIG. **2** shows a front view of a second saw tooth **12***b*, which substantially corresponds to the first saw tooth **12***a* according to FIG. **1**. In contrast to the first saw tooth **12***a*, the second saw tooth **12***b* is rounded between a cutting face **16***b* and an attachment projection **18***b*. The roundings are indicated by reference signs **22** and **24**. The roundings **22** and **24** minimize the risk of a crack forming due to a notch effect on the second saw tooth **12***b*.

[0054] FIG. **3** shows a front view of a third saw tooth **12***c*, which has a round positioning recess **26** on an attachment projection **18***c*. The round positioning recess **26** is used to position and install the third saw tooth **12***c* relative to a saw blade body.

[0055] FIG. **4** shows a front view of a fourth saw tooth **12***d* having an attachment projection **18***d*. The attachment projection **18***d* comprises a notch-shaped positioning recess **28**. The notch-shaped positioning recess **28** is used for the exact positioning of the fourth saw tooth **12***d* on an appropriate saw blade body.

[0056] FIG. **5** shows a front view of a fifth saw tooth **12***e* in the form of a flat tooth. A cutting face **16***e* of the fifth saw tooth **12***e* has a height H_S', which is smaller than a width B_S' of the cutting face **16***e*. The fifth saw tooth **12***e* does not have an attachment projection. The height H_S' therefore corresponds to the overall height H_G'.

[0057] FIG. **6** shows a sixth saw tooth **12***f* in the form of a top tooth. A cutting face **16***f* of the sixth saw tooth **12***f* also has a greater width B_S'' than height H_S''.

[0058] Generally speaking, the saw tooth can have any suitable blade geometry, for example, also in the form of a trapezoidal tooth or an alternating direction tooth.

[0059] FIG. **7***a* shows a front view of a seventh saw tooth **12***g*. The front view of the saw tooth **12***g* corresponds to the front view of the saw teeth according to FIGS. **7***b*-**7***f*, which are described in the following. A contour edge **29** is visible only in the front view corresponding to FIGS. **7***c* and **7***f*.

[0060] FIG. **7***b* shows the saw tooth **12***g*, in a side view. The saw tooth **12***g* comprises a cutting-face part **15***g* and an attachment projection **18***g*. The front side of the saw tooth **12***g* is provided with a coating **32***g*. The coating **32***g* extends over the front side of the cutting-face part **15***g*, i.e., over the cutting face **16***g*, and over the front side of the attachment projection **18***g*.

[0061] FIG. **7***c* shows a side view of a saw tooth **12***h* having a cutting-face part **15***h*, an attachment projection **18***h* and a coating **32***h*. The coating **32***h* is provided only on the front side of the cutting-face part **15***h*. The attachment projection **18***h* does not have a coating. As a result, the saw tooth **12***h* is easily soldered, welded and/or bonded to a corresponding saw blade body via the attachment projection **18***h*.

[0062] FIG. **7***d* shows a side view of a saw tooth **12***i*. The saw tooth **12***i* substantially corresponds to the saw tooth **12***g* according to FIG. **7***b*, wherein, in contrast to the attachment projection **18***g*, an attachment projection **18***i* is thinner on the back side thereof. A step **34** is thereby formed between the attachment projection **18***i* and a cutting-face part **15***i*. During sawing, the cutting-face part **15***i* bears against a saw blade body via the step **34**. The loadability of the ninth saw tooth **12***i* during sawing is increased as a result.

[0063] FIG. **7***e* shows a saw tooth **12***j*, which substantially corresponds to the saw tooth **12***l* according to FIG. **7***d*. In the case of the saw tooth **12***j*, however, the thickness of an attachment projection **18***j* is reduced to the extent that only a coating **32***j* remains.

[0064] FIG. **7***f* shows a saw tooth **12***k*. The saw tooth **12***k* substantially corresponds to the saw tooth **12***i* according to FIG. **7***d*, wherein, in contrast to the saw tooth **12***i*, only one cutting-face part **15***k* has a coating **32***k*.

[0065] FIG. **8***a* shows a side view of a second saw blade **10***b*, in sections. The second saw blade **10***b* has a saw blade body **14***b*. A saw tooth **12***l* and a saw tooth **12***m* are attached to the saw blade body **14***b*. An arrow **36** indicates the cutting direction of the second saw blade **10***b*.

[0066] FIG. **8***b* shows the saw tooth **12***l* without the second saw blade **10***b*. A comparison of FIGS. **8***a* and **8***b* reveals that the saw tooth **12***l* according to FIG. **8***a* is anchored in the saw blade body **14***b* by a press fit. Likewise, the saw tooth **12***m* is anchored in the saw blade body **14***b* by a press fit, wherein the saw teeth **12***l* and **12***m* are identically designed. As an alternative or in addition to the attachment of the saw teeth by a press fit, one saw tooth **12***l*, **12***m* or all saw teeth **12***l*, **12***m* can be attached on the saw blade body **14***b* in another manner, such as by soldering, welding, and/or bonding.

[0067] A saw tooth receptacle **38***a* is provided in the saw blade body **14***b*, as shown in FIG. **8***a*, in order to accommodate the saw tooth **12***l*. The saw tooth receptacle **38***a* is substantially U-shaped. The depth of the saw tooth receptacle **38***a* is labelled with T_1. The depth T_1 of the saw tooth receptacle **38***a* corresponds to the thickness of a cutting-face part **15***l* and the thickness of an attachment projection **18***l* of the twelfth saw tooth **12***l*. As a result, the twelfth saw tooth **12***l* is securely held on the saw blade body **14***b*.

[0068] FIG. **9** shows a section of a side view of a third saw blade **10***c* having a saw blade body **14***c*. A saw tooth **12***n* and a saw tooth **12***o* are attached to the saw blade body **14***c*. The saw tooth **12***n* and the saw tooth **12***o* are identically designed. The saw blade body **14***c* has a saw tooth receptacle **38***b* and a saw tooth receptacle **38***c*. The depth of the saw tooth receptacle **38***b* is labelled with T_2, and the depth of the saw tooth receptacle **38***c* is labelled with T_3. T_2 and T_3 are greater than the thickness of the saw tooth **12***n* and the saw tooth **12***o*, respectively. The third saw blade **10***c* therefore has a chip space behind the saw tooth **12***n* and the saw tooth **12***o*, relative to the cutting direction.

[0069] FIG. **10***a* shows a saw tooth **12***p* in a front view. In contrast to the previously described saw teeth, the saw tooth **12***p* has two measurement projections **40***a*, **40***b*. The measurement projections **40***a*, **40***b* result in an extension of the lateral faces **42***a*, **42***b* of the saw tooth **12***p*. The measurement projections **40***a*, **40***b* are used to accurately measure and adjust the position and angle of inclination (radial angle) of the lateral surfaces **42***a*, **42***b* while these undergo sharpening or erosion processing. Once the saw tooth **12***p*, as shown in FIG. **10***a*, is finished, the measurement projections **40***a*, **40***b* are removed along the broken lines and are no longer present on the "finished" saw tooth.

[0070] FIG. **10***b* shows a saw tooth **12***q*. The saw tooth **12***q* has measurement projections **40***c*, **40***d* to permit the geometry of this saw tooth to be accurately determined. Once the

desired geometry, as shown, has been obtained, the measurement projections **40***c*, **40***d* are removed along the broken lines.

[0071] FIG. **10***c* shows a saw tooth **12***r*. The geometry of the saw tooth **12***r* is exactly determined and checked during production by measurement projections similar to those of FIGS. **10***a* and **10***b*, namely the measurement projections **40***e*, **40***f* in this case. Afterward, the measurement projections **40***e*, **40***f* are removed along the broken lines.

[0072] FIG. **11***a* shows a saw tooth **12***s* having an attachment projection **18***s*. The attachment projection **18***s* is wider toward the bottom, i.e., toward a saw blade body. The attachment projection therefore has a substantially dovetailed shape.

[0073] FIG. **11***b* shows a saw tooth **12***t* having an attachment projection **18***t*, which is narrower toward the bottom. The attachment projections **18***s* (see FIG. **11***a*) and **18***t* are particularly well-suited for attaching the saw teeth **12***s* (see FIG. **11***a*) and **12***t* in correspondingly designed saw tooth receptacles.

[0074] Generally speaking, the attachment projection of a saw tooth can have a non-parallel course relative to a central plane of a saw blade body, as made evident in FIGS. **11***a* and **11***b*, as examples.

[0075] FIG. **12** shows a section of a side view of a fourth saw blade **10***d* having a saw blade body **14***d*. A saw tooth **12***u* and a saw tooth **12***v* in saw tooth receptacles **38***d*, **38***e* are attached to the saw blade body **14***d*. In contrast to the previously described saw blade bodies, the saw blade body **14***d* comprises a raised area **44***a*, **44***b* in front of each of the saw tooth receptacles, namely the saw tooth receptacles **38***d*, **38***e* in this case, as viewed in the cutting direction. The raised areas **44***a*, **44***b* reduce the load on the saw teeth **12***u* and **12***v*. The raised area **44***b* is slanted on one side, toward the central plane of the saw blade body **14***d*. As an alternative, the raised area **44***b* is slanted on both sides, toward the central plane of the saw blade body **14***d*, or has a bevel.

[0076] In the representation shown in FIG. **12**, the raised areas **44***a*, **44***b* have a gap **46***a*, **46***b*, respectively, relative to the saw teeth **12***u*, **12***v*. It is also feasible, however, to not provide a gap between the raised areas **44***a*, **44***b* and the saw teeth **12***u*, **12***v*, respectively.

[0077] Generally speaking, such a radial raised area of the saw blade body in front of a saw blade receptacle can be used in combination with any previously described saw tooth.

[0078] As will be evident to persons skilled in the art, the foregoing detailed description and figures are presented as examples of the invention, and that variations are contemplated that do not depart from the fair scope of the teachings and descriptions set forth in this disclosure. The foregoing is not intended to limit what has been invented, except to the extent that the following claims so limit that.

What is claimed is:

1. A saw tooth for a saw blade is attached in a longitudinal direction on the saw blade body to extend away, at least in part, from the saw blade body, the, saw tooth comprising:

a cutting-face part having a cutting face with a height (H_S, H_S', H_S'') extending in the longitudinal direction and a width (B_S, B_S', B_S'') extending perpendicularly to the longitudinal direction,

wherein the width (B_S, B_S', B_S'') of the cutting face is greater than the height (H_S, H_S', H_S'') of the cutting face.

2. The saw tooth according to claim **1**, further comprising an attachment projection, which extends away from the cutting face in the longitudinal direction.

3. The saw tooth according to claim **2**, wherein the attachment projection is larger in the longitudinal direction than the height (H_S, H_S', H_S'') of the cutting face.

4. The saw tooth according to claim **2**, wherein a width (BB) of the attachment projection is smaller than the width (B_S, B_S'') of the cutting face.

5. The saw tooth according to claims **2**, wherein the saw tooth has a thickness extending perpendicularly to the height (H_S, H_S', H_S'') of the cutting face and perpendicularly to the width (B_S, B_S', B_S'') of the cutting face and wherein the thickness of the cutting-face part corresponds to a thickness of the attachment projection.

6. The saw tooth according to claim **2**, wherein the thickness of the cutting-face part is greater than the thickness of the attachment projection.

7. The saw tooth according to claim **2**, wherein at least one transition between the cutting-face part and the attachment projection is rounded.

8. The saw tooth according to claim **7**, wherein all transitions between the cutting-face part and the attachment projection are rounded.

9. The saw tooth according to claim **1**, wherein the cutting face comprises a coating having a hardness that is greater than a hardness of a remainder of the cutting-face part.

10. The saw tooth according to claim **9**, wherein the attachment projection does not have a coating.

11. The saw tooth according to claim **1**, wherein the attachment projection comprises a positioning recess, a positioning projection or both.

12. A saw blade comprising:

a saw blade body; and

at least one saw tooth attached in a longitudinal direction on the saw blade body to extend away, at least in part, from the saw blade body and formed with a cutting-face part having a cutting face with a height (H_S, H_S', H_S'') extending in the longitudinal direction and a width (B_S, B_S', B_S'') extending perpendicularly to the longitudinal direction,

wherein the width (B_S, B_S', B_S'') of the cutting face is greater than the height (H_S, H_S', H_S'') of the cutting face; and.

wherein the saw tooth is attached in a saw tooth receptacle of the saw blade body.

13. The saw blade according to claim **12**, wherein the attachment projection comprises a positioning recess, a positioning projection or both and wherein the saw tooth receptacle comprises a position projection corresponding to the positioning recess, a position recess corresponding to the positioning projection or both.

14. The saw blade according to claim **1**, wherein a depth (T_1) of the saw tooth receptacle corresponds, in a cutting direction of the saw blade, to the thickness of the cutting-face part, the thickness of the attachment projection or both.

15. The saw blade according to claim **12**, wherein a depth (T_2, T_3) of the saw tooth receptacle is greater, in the cutting direction of the saw blade, than the thickness of the cutting-face part.

16. The saw blade according to claim **12**, wherein the saw blade is a circular saw blade, an endless saw blade, a disk-shaped milling cutter, or a hacksaw blade.

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