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Datasheet for the decision of 23 May 2017

Case Number: T 0821/13 - 3.2.08

Application Number: 05711076.9

Publication Number: 1727638

IPC: B23C5/24

Language of the proceedings: EN

Title of invention:
SLOT MILLING CUTTER

Patent Proprietor:
Sandvik Intellectual Property AB

Opponent:
EMUGE-Werk Richard Glimpel GmbH & Co. KG

Headword:

Relevant legal provisions:
EPC R. 76(2)(c)
EPC Art. 54, 56
RPBA Art. 12(4), 13(1)

Keyword:
Extent of opposition
Novelty
Inventive step

Decisions cited:

Catchword:

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Case Number: T 0821/13 - 3.2.08

D E C I S I O N
of Technical Board of Appeal 3.2.08
of 23 May 2017

Appellant: (Opponent)	EMUGE-Werk Richard Glimpel GmbH & Co. KG Fabrik für Präzisionswerkzeuge Nürnberger Strasse 96-100 91207 Lauf (DE)
Representative:	Schröer, Gernot H. Meissner Bolte Patentanwälte Rechtsanwälte Partnerschaft mbB Bankgasse 3 90402 Nürnberg (DE)
Respondent: (Patent Proprietor)	Sandvik Intellectual Property AB 811 81 Sandviken (SE)
Representative:	WSL Patentanwälte Partnerschaft mbB Kaiser-Friedrich-Ring 98 65185 Wiesbaden (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 4 February 2013 rejecting the opposition filed against European patent No. 1727638 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairwoman	P. Acton
Members:	M. Alvazzi Delfrate
	O. Loizou

Summary of Facts and Submissions

I. By its decision posted on 4 February 2013 the opposition division rejected the opposition against the European patent No. 1 727 638.

II. The appellant (opponent) lodged an appeal against this decision in the prescribed form and within the prescribed time limits.

III. Oral proceedings before the board of appeal were held on 23 May 2017.

The appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent (patent proprietor) requested that the appeal be dismissed and that the patent be maintained as granted or, alternatively, that the patent be maintained on the basis of the set of claims of one of auxiliary requests 1, 2, 4 and 5 as filed with its reply dated 11 October 2013, or auxiliary request 3 as filed with letter dated 17 August 2016.

IV. Claims 1 and 5 of the main request (patent as granted) read as follows:

"1. Slot milling cutter, which comprises a cutting head (1; 101; 201) as well as a fastener (3) integrated with the cutting head, which fastener is intended to be received in a tool coupling, the cutting head (1; 101; 201) being provided with at least two insert seats (5; 105; 205), and cutting inserts (7; 107) having at least one toothed edge side (9; 109) being mounted in the insert seats (5; 105; 205),

characterized in that the insert seats (5; 105; 205) are provided with first serrations (4; 104; 204), that the cutting inserts (7; 107) are provided with second serrations (11; 111), which are arranged on at least one main surface (8; 108) of the cutting inserts (7; 107) and extending parallel to the edge side (9; 109) of the cutting insert (7; 107), that the first and second serrations (4, 11; 104, 111; 204, 111) extend in the axial direction (C-C) of the slot milling cutter, that a stabilization of the cutting insert (7) is effected in the radial direction of the slot milling cutter by co-operation between the first and second serrations (4, 11; 104, 111; 204, 111), and that adjacent to at least one of the insert seats (5; 105), means (14-20) are arranged in order to adjust the position of the appurtenant cutting insert (7; 107) in the axial direction (C-C) of the slot milling cutter."

"5. Cutting insert (7; 107) intended to be included as a replaceable cutting insert in a slot milling cutter, the cutting insert (7; 107) being mounted in an insert seat (5; 105) of the slot milling cutter, and the cutting insert (7; 107) having at least one toothed edge side (9; 109),
characterized in that the cutting insert (7; 107) is provided with serrations (11; 111), which are arranged on at least one of the main surfaces (8, 108) of the cutting insert, and that the serrations (11; 111) extend parallel to the edge side (9; 109) of the cutting insert (7; 107):"

Auxiliary request 1 differs from the main request in that claim 5 reads as follows (additions to the main request underlined, deletions struck through):

"5. Cutting insert (7; 107) intended to be included as a replaceable cutting insert in a slot milling cutter, the cutting insert (7; 107) being mounted in an insert seat (5; 105) of the slot milling cutter, and the cutting insert (7; 107) having at least one toothed edge side (9; 109),
~~characterized in that~~ wherein the cutting insert (7; 107) is provided with serrations (11; 111), which are arranged on at least one of the main surfaces (8, 108) of the cutting insert, ~~and that~~ characterized in that the serrations (11; 111) extend parallel to the edge side (9; 109) of the cutting insert (7; 107) such that the cutting insert (7, 107) is adjustable in a direction parallel to the edged side (9; 109)."

Auxiliary request 2 differs from the main request in that claim 5 reads as follows (additions to the main request underlined, deletions struck through):

"5. Cutting insert (7; 107) intended to be included as a replaceable cutting insert in a slot milling cutter, the cutting insert (7; 107) being mounted in an insert seat (5; 105) of the slot milling cutter, and the cutting insert (7; 107) having at least one toothed edge side (9; 109),
~~characterized in that~~ wherein the cutting insert (7; 107) is provided with serrations (11; 111), which are arranged on at least one of the main surfaces (8, 108) of the cutting insert, ~~and that~~ characterized in that the serrations (11; 111) extend parallel to the edge side (9; 109) of the cutting insert (7; 107) such that the cutting insert (7, 107) is adjustable in an axial direction of the slot milling cutter."

Auxiliary request 3 differs from the main request in that claim 5 and additional independent claims 6 and 7

read as follows (additions to the main request underlined).

"5. Cutting insert (7; 107) intended to be included as a replaceable cutting insert in a slot milling cutter, the cutting insert (7; 107) being mounted in an insert seat (5; 105) of the slot milling cutter, and the cutting insert (7; 107) having at least one toothed edge side (9; 109),
characterized in that the cutting insert (7; 107) is provided with serrations (11; 111), which are arranged on at least one of the main surfaces (8, 108) of the cutting insert, and that the serrations (11; 111) extend parallel to the edge side (9; 109) of the cutting insert (7; 107), wherein the cutting insert (7;107) has serrations (11;111) on both the main surfaces (8; 108) thereof."

"6. Cutting insert (7; 107) intended to be included as a replaceable cutting insert in a slot milling cutter, the cutting insert (7; 107) being mounted in an insert seat (5; 105) of the slot milling cutter, and the cutting insert (7; 107) having at least one toothed edge side (9; 109),
characterized in that the cutting insert (7; 107) is provided with serrations (11; 111), which are arranged on at least one of the main surfaces (8, 108) of the cutting insert, and that the serrations (11; 111) extend parallel to the edge side (9; 109) of the cutting insert (7; 107), wherein it has two opposed toothed edge sides (9)."

"7. Cutting insert (7; 107) intended to be included as a replaceable cutting insert in a slot milling cutter, the cutting insert (7; 107) being mounted in an insert seat (5; 105) of the slot milling cutter, and the

cutting insert (7; 107) having at least one toothed edge side (9; 109),
characterized in that the cutting insert (7; 107) is provided with serrations (11; 111), which are arranged on at least one of the main surfaces (8, 108) of the cutting insert, and that the serrations (11; 111) extend parallel to the edge side (9; 109) of the cutting insert (7; 107), it has a negative basic shape and positive cutting geometry."

Auxiliary requests 4 and 5 have no bearing on this decision.

V. The following documents played a role for the present decision:

D1: US -A- 5,873,684;
D2: WO -A- 01/00362;
D3: US -A- 1,938,717;
D4: US -A- 2,102,478;
D5: US -A- 1,681,675;
D6: DE -A- 199 58 636;
D7: DE -A- 196 31 578;
D8: DE -A- 505 182;
D9: DE -A- 35 33 125;
D10: US -A- 1,702,485.

VI. The arguments of the appellant can be summarised as follows:

Late-filed documents and submissions

D8, D9 and D10 had been submitted with the statement of grounds and were *prima facie* highly relevant for the points addressed in the decision under appeal. Hence, they should be admitted into the proceedings.

The inventive-step attack on claim 5 based on D1 in combination with D9 had already been considered in the decision under appeal. Thus, it was also to be considered in the appeal proceedings.

Main request - claim 5 - novelty

The subject-matter of claim 5 lacked novelty in view of of D1 and D2 respectively.

D1 disclosed a cutting insert with all the features of claim 5. In particular, the two portions of the surface extending on the two sides of the groove 26 were serrations in accordance with claim 5.

D2 also disclosed a cutting insert with all the features of claim 5. From Figure 1D, which depicted a cross-section along one of the recesses, three teeth were visible: a tooth represented by cutting edge 7, a second tooth represented by the protrusion between chip surface 8 and step 11, and a third one represented by corner 12. Said teeth constituted serrations in accordance with claim 5.

Main request - inventive step

Even if claim 5 were to be regarded as novel over D1, its subject-matter was obvious starting from that document. The serrations of the claimed insert improved the radial fixation. The same effect was obtained by serrations parallel to the rotation axis and to the cutting edge as shown in D9. The person skilled in the art would have applied the teaching of D9 to the insert of D1, where the centrifugal forces were smaller. Moreover, the application of this teaching did not

require substantial modifications of the insert of D1 but merely the addition of further grooves to the groove parallel to the cutting insert which was already present in D1.

Therefore, the subject-matter of claim 5 did not involve an inventive step.

Auxiliary requests 1 and 2

The insert of claim 5 of auxiliary requests 1 and 2 did not involve an inventive step for the same reasons as explained for the main request.

Auxiliary request 3

Claim 1, which was directed to the whole cutter, also lacked inventive step. In D1 the stop dowel 20 determined the position of the insert. In view of the very broad meaning of the wording "means are arranged in order to adjust the position of the cutting insert" the stop dowel 20 was covered by this definition. Starting from D1 it was also obvious, in view of its simplicity, to adopt the whole fixation system of D9. Since the system of D9 had co-operating serrations on the insert and on the insert seat, as well as means for adjusting the position of the insert represented by stop body 5, the combination of D1 and D9 led to the claimed invention.

Moreover, claim 1 also lacked inventive step when starting from from D3 or D9, in both cases in combination with D7. The problem to be solved starting from D3 or D9 was to modify the cutter so as to be able to produce a toothed geometry. To solve this problem by providing an insert with a toothed geometry was

rendered obvious by D7, which disclosed an insert with a toothed and a non-toothed cutting edge.

Claim 5 also lacked inventive step starting from D1 in combination with D3. The insert of D3 could be indexable ("Wendeschneidplatte"), in which case it was obvious to provide the insert with serrations on both main surfaces.

In respect of claims 6 and 7 reference was made to the written submissions, where it was explained that the additional features were known from D6 or D7 (for claim 6) and D2 or D7 or D9 (for claim 7). Thus, claim 6 did not involve an inventive step over D3, D4 or D5 in combination with D1+D6 or over D8 or D10 in combination with the common general knowledge or D1, D2+D6. Claim 7 did not involve an inventive step over D3 or D4 or D5 in combination with D1+D9 or over D8 or D10 in combination with common general knowledge or D1+D7, D2+D7 or D7.

VII. The arguments of the respondent can be summarised as follows:

Extent of the opposition

The reasons given in the notice of opposition were limited to independent claim 5. Thus, there was no validly filed opposition against claims 1 to 4.

Late-filed documents and submissions

D8, D9 and D10 were not *prima facie* relevant because they did not relate to inserts with a toothed edge side and did not clearly and unambiguously disclose serrations parallel to the cutting edge. Hence, filing

them could not be considered a reaction to the decision under appeal, and they should not be admitted into the proceedings.

In any event, the inventive-step attack against claim 5 based on D1 in combination with D9 had not been submitted in the statement of grounds of appeal; it had been made for the first time in the letter of 24 April 2017. Since there was no reason for this delay, at least this line of attack should be disregarded.

Main request - claim 5 - novelty in view of D1

Neither D1 nor D2 was detrimental to novelty of the subject-matter of claim 5.

The cutting insert of D1 had only one groove 26 arranged on one of the main surfaces. The portions of the surface extending on the two sides of the groove could not be regarded as serrations in accordance with claim 1.

Also in the insert of D2 there were no serrations in accordance with claim 1, because the claim required the serrations to be arranged on the main surface. Hence, they could not be represented by the surface itself.

Main request - inventive step

Starting from D1, the problem solved by the insert of claim 5 was to improve the positional fixation.

D9 dealt with high-speed milling. Since the centrifugal forces were different from those occurring in the thread-milling cutter of D1, which rotated at a lower

speed, the person skilled in the art would not have taken D9 into consideration for solving said problem.

Moreover, applying the teaching of D9 to the insert of D1 would have meant completely changing the fixation system disclosed in D1. Also for this reason the person skilled in the art would not have applied the teaching of D9 to the cutting insert of D1.

In any event, D9 showed some serrations but did not clearly and unambiguously disclose that they were parallel to the cutting edge. Hence, the combination of D1 and D9 did not lead to the claimed cutter.

Therefore, the subject-matter of claim 5 involved an inventive step.

Auxiliary requests 1 and 2

The subject-matter of claim 5 of auxiliary requests 1 and 2 involved an inventive step for the same reasons as given for the main request.

Auxiliary request 3

Claim 1 was directed to the whole slot-milling cutter. Starting from D1, it was not obvious to provide serrations on the insert seat, as shown in D9, because this would go against the teaching of D1, which was directed to a different type of fixation. Moreover, the combination of D1 and D9 would not lead to the claimed invention, because neither the stop dowel of D1 nor the stop body of D9 was means for adjusting the position of the insert. Thus, it was not obvious to arrive at claim 1 starting from D1.

The inventive-step attacks against claim 1 starting from D3 or D9 were even less relevant. These documents were not an appropriate starting point because they related to inserts with straight cutting edges, i.e. were directed to a different use than the claimed cutter. The person skilled in the art had no reason to modify said prior-art inserts to provide them with a toothed cutting edge. Thus, claim 1 involved an inventive step.

Claim 5 of auxiliary request 3 provided a further difference in respect of D1 because the claimed cutting insert had serrations on both its main surfaces. It was not obvious to realise the insert of D1 as an indexable insert with serrations or grooves on both sides. D3 in particular could not render it obvious, because in its indexable insert the serrations were on only one surface and indexing was not performed by exchanging the upper and the lower main surfaces. Therefore, the subject-matter of claim 5 involved an inventive step.

In the written proceedings it was submitted that none of documents D3, D4, D5, D8 or D10 qualified as closest prior art for claims 6 or 7. Hence, the subject-matter of these claims also involved an inventive step.

Reasons for the Decision

1. Extent of the opposition

According to Rule 76(2)(c) EPC a notice of opposition shall contain a statement of the extent to which the European patent is opposed and of the grounds on which the opposition is based, as well as an indication of

the facts and evidence presented in support of these grounds. In the present case the notice of opposition was expressly directed to the patent as whole (point IV) and comprised some, albeit very limited, arguments against claim 1 (point II.3). Hence, the whole patent was opposed and, as a consequence, both the opposition and the present appeal must consider all independent claims.

2. Late-filed documents and submissions

2.1 D8, D9 and D10 were not cited in the opposition proceedings. Hence, they are late-filed documents and their admission into the proceedings is subject to the Board's discretion.

When considering inventive step in the appealed decision (point 4.5) the opposition division found that, starting from D1 as closest prior art, no document taught to provide a thread-cutting insert with serrations that extended parallel to the edge side of the cutting insert, wherein the problem solved was to provide an insert with a toothed edge side which could be better fixed in a radial direction and at the same time could be continuously adjusted in an axial direction. D8, D9 and D10 all show cutting inserts with serrations that extend in the longitudinal direction of the insert and allow continuous adjustment of the insert in an axial direction. Accordingly, filing them is considered a reaction to the appealed decision. Hence, considering also that they were filed at the earliest possible stage of the appeal proceedings, namely together with the statement of grounds of appeal, the Board decided to admit D8, D9 and D10 into the proceedings (Article 12(4) RPBA).

2.2 The inventive-step attack against claim 5 based on D1 in combination with D9 was not submitted in the statement of grounds of appeal; it was made for the first time in the letter of 24 April 2017.

However, this submission may be considered as prompted by the Board's communication indicating that D1 could represent the closest prior art.

Moreover and most importantly, this line of attack is based on documents already submitted with the statement of grounds and, having been submitted one month before the oral proceedings, could be considered by both the respondent and the Board without causing any delay in the proceedings.

Under these circumstances the Board decided to admit it into the proceedings (Article 13(1) RPBA).

3. Main request - claim 5 - novelty

Novelty of the subject-matter of claim 5 has been objected to in view of each of D1 and D2.

3.1 D1 discloses a cutting insert (24) intended to be included as a replaceable cutting insert in a slot-milling cutter, the cutting insert being mounted in an insert seat (28) of the slot-milling cutter, and having at least one toothed edge side (see Figure 1 below).

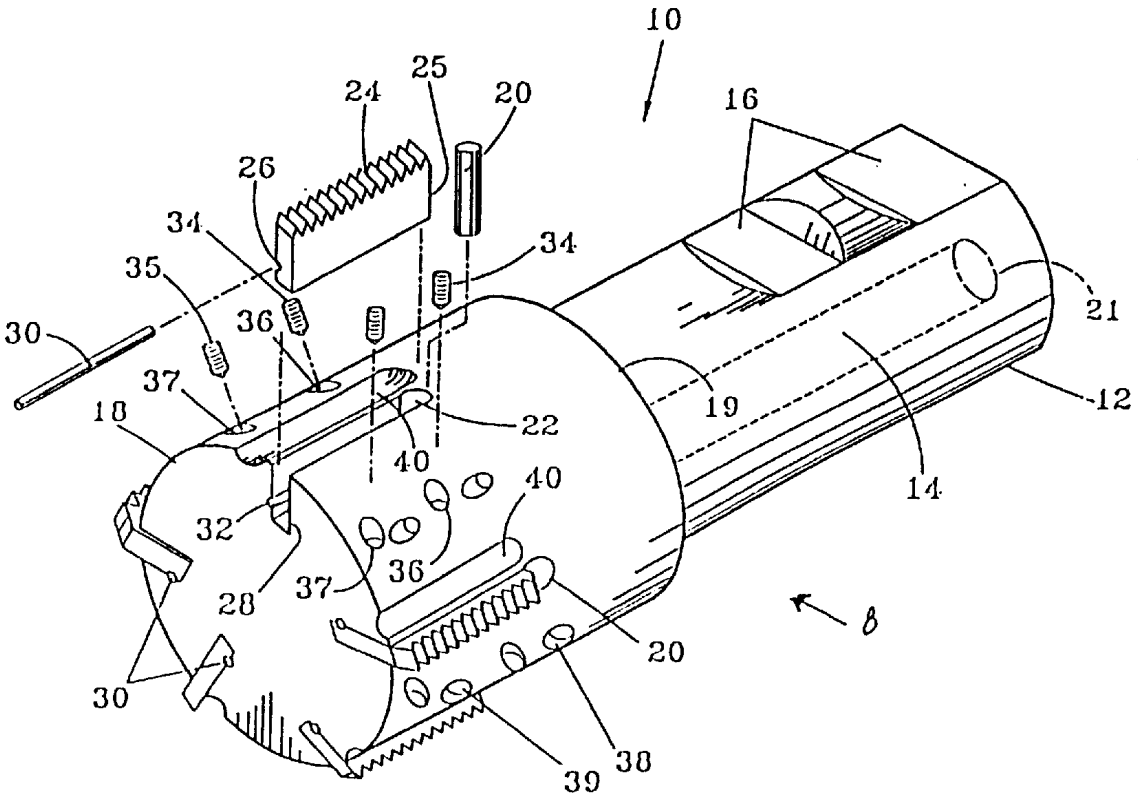


FIG.1

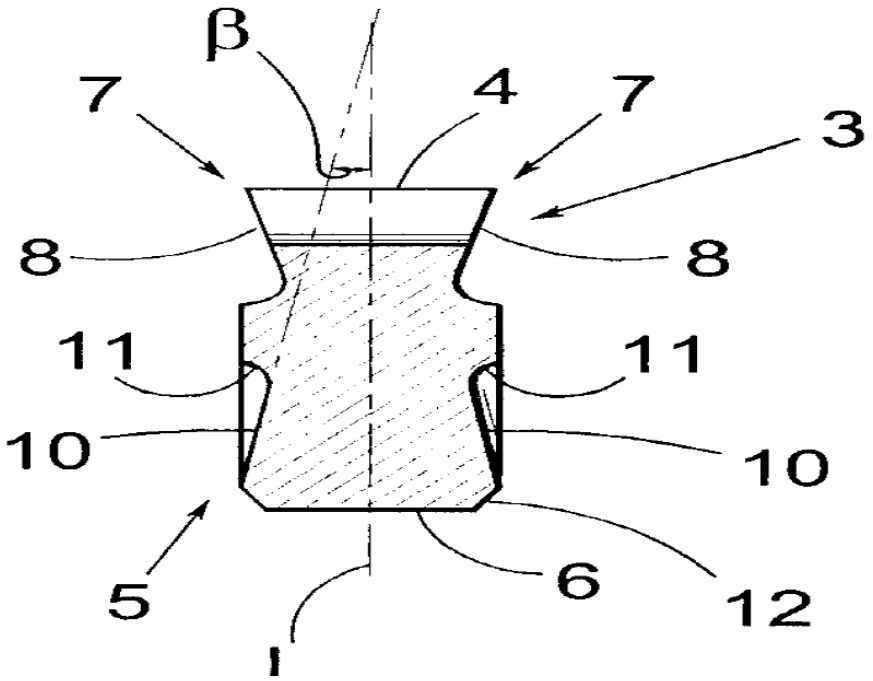
The insert has a groove 26 arranged on one of the main surfaces and extending parallel to the edge side. In the appellant's view the two portions of the surface extending on the two sides of the groove constitute two protrusions in respect of the groove, representing the serrations in accordance with claim 5. However, according to claim 5 the serrations are "arranged on at least one of the main surfaces" of the cutting insert. Hence, they cannot be represented by the main surface itself. Therefore, the insert of D1 is not provided with serrations according to claim 5, whose subject-matter is novel over D1.

3.2 D2, in particular Figures 1a and 1b, discloses a cutting insert intended to be included as a replaceable cutting insert in a slot-milling cutter, the cutting

insert being mounted in an insert seat (see Figure 3) of the slot-milling cutter, and the cutting insert having at least one toothed edge side (7). The insert has planar support surfaces 9, in which recesses 10 are formed.

Referring to the cross-section across one of the recesses shown in Figure 1D (reproduced below), the appellant maintained that three teeth, constituting serrations in accordance with claim 5, were present: a first tooth represented by cutting edge 7, a second tooth represented by the protrusion between chip surface 8 and step 11, and a third one represented by corner 12.

Fig. 1D



However, again the Board would point out that according to claim 1 the serrations are "arranged on at least one of the main surfaces" of the cutting insert. Hence, they can only be represented by teeth that protrude from said main surface. Of the elements identified by the appellant, only the central one (the protrusion between chip surface 8 and step 11) could be regarded as a tooth protruding from the main surface.

Therefore, the insert known from D2 is likewise not provided with a plurality of serrations according to claim 5, whose subject-matter is therefore novel over D2.

4. Main request - inventive step

The closest prior art for assessing inventive step should be a document directed to the same purpose or effect as the invention. The claims and claim 5 in particular relate to inserts with a toothed cutting edge, i.e. inserts whose purpose is the manufacture of threaded or toothed geometries (see also paragraph [0001] of the patent in suit). Hence, D1, which is directed to the same purpose and discloses inserts with a plurality of features in accordance with claim 5, is considered to represent the closest prior art.

Starting from D1, the problem solved by the insert of claim 5 is to improve the positional fixation (paragraph [0005] of the patent in suit). Due to the serrations the radial positioning of the insert is stabilised, while the possibility of adjusting the position in the axial direction is not impaired (paragraph [0012] of the patent in suit).

The person skilled in the art, who is familiar with cutting tools in general and not only with toothed tools, would take D9 into consideration for solving this problem. The fact that D9 deals with high-speed milling where high centrifugal forces come into play would not have dissuaded him from doing so. If a fixation system is able to cope with the high centrifugal forces generated in D9 it will, *a fortiori*, also be able to cope with the forces generated in the thread-milling cutter of D1, which rotates at lower speed.

D9 teaches that by using teeth and grooves parallel to the axis of rotation a stable radial positioning is obtained (column 3, lines 31-36 and Figures 2-3), even if the single teeth may suffer some deformation due to the high forces in play (column 2, lines 12-15).

Applying this teaching to the insert of D1 does not necessarily imply completely changing the fixation system disclosed in this document, but may be done for instance by adding further grooves parallel to the rotation axis.

Since in D1 groove 26 is parallel to both the rotation axis and the toothed edge, said further grooves will also be parallel to the cutting edge.

Hence, applying the teachings of D9 to the cutting insert of D1 rendered it obvious to solve the problem above by an insert in accordance with claim 5. Therefore, the subject-matter of claim 5 does not involve an inventive step.

5. Auxiliary requests 1 and 2

The insert obtained by combining the teachings of D1 and D9 can be moved in the direction parallel to the edged side, which in the case of D1 is also the axial direction of the slot-milling cutter, in order to fix it in different axial positions. Hence, it would be adjustable in this direction, as required by claim 5 of auxiliary requests 1 and 2. Therefore, the subject-matter of claim 5 of said requests does not involve an inventive step either.

6. Auxiliary request 3

6.1 Claim 1

6.1.1 D1 and D9

Claim 1 is not directed to a cutting insert like claim 5 but to the whole slot-milling cutter. Accordingly, in the claimed product serrations are provided not only on the inserts (second serrations), but also on the insert seats (first serrations), with stabilisation of the cutting insert being effected in the radial direction of the slot-milling cutter by co-operation between the first and second serrations. Moreover, in the claimed cutter, means are arranged adjacent to at least one of the insert seats in order to adjust the position of the appurtenant cutting insert in the axial direction of the slot milling cutter.

Starting from the closest prior art D1 and faced with the problem of improving the positional fixation of the inserts, the person skilled in the art would not arrive at the claimed slot-milling cutter.

It is true that D9 shows a combination of insert seats and inserts wherein serrations are provided not only on the inserts but also on the insert seats, to co-operate with each other and stabilise the cutting insert in the radial direction of the cutter (see Figures 2 and 3). However, to adopt this solution instead of the system of D1, which foresees a pin (30) interposed between cutting insert and insert seat and secured by securing members (34, 35), would go against the teaching of D1, of which the pin and securing members are essential parts (see claim 1 and column 2, lines 58-65).

Moreover, even replacing the fixation system of D1 with that of D9 would not lead to the claimed product because, contrary to the appellant's opinion, neither D1 nor D9 discloses means to adjust the position of the appurtenant cutting insert in the axial direction. Both the stop dowel (20) of D1 and the stop body (5) of D9 do not allow any adjustment of the position of the insert. In order to move the insert to a different position it would be necessary to replace the stop dowel or stop body with a different one.

Therefore, it was not obvious to arrive at the claimed slot-milling cutter starting from D1.

6.1.2 D3 and D7

The appellant submitted two further lines of inventive-step attack, starting from D3 or D9, in both cases in combination with D7.

In the cutters of both D3 (see Figures 1 and 2) and D9 (see Figures 1 and 3) the inserts do not exhibit toothed but straight cutting edges. Thus they are not

conceived for the same purpose as the claimed cutter and without hindsight knowledge of the present invention the person skilled in the art would not choose them as the starting point for developing it

Indeed, the problem formulated by the appellant starting from D3 or D9, namely to provide a cutter for producing a toothed geometry, is a classical example of *ex post facto* analysis, since it comprises a pointer to the claimed solution.

Thus, the lines of attack starting from D3 or D9 do not convince the Board that it was obvious to arrive at the subject-matter of claim 1.

6.2 Claim 5

Claim 5 of auxiliary request 3 further specifies (in respect of claim 5 as granted) that the cutting insert has serrations on both its main surfaces.

This feature is a further difference to D1, which discloses an insert with a groove on only one of the main surfaces (see drawings).

The appellant argued that it would be obvious to provide serrations on both main surfaces in order to use the insert as an indexable insert of which the upper (i.e. leading during the cutting operation) and the lower (i.e. trailing during the cutting operation) main surfaces are interchangeable.

However, the insert disclosed in D1 is not an indexable insert (see in particular Figure 2).

As to D3, it is true that its insert is indexable ("Wendeschneidplatte"). However, at least from the drawings, it is clear that the indexing is not performed by exchanging the upper and the lower main surfaces but rather by exchanging the two opposed cutting edges of the same surface while leaving unchanged the upper and the lower main surfaces.

Therefore, it was not obvious to arrive at the subject-matter of claim 5 either.

6.3 Claims 6 and 7

Claims 6 and 7 of auxiliary request 3 further specify (in respect of claim 5 as granted) that the cutting insert has two opposed toothed edge sides (claim 6) or has a negative basic shape and positive cutting geometry (claim 7).

These features are further differences to D1 (see drawings).

The appellant did not submit any reason and the Board cannot see one either to modify the insert of D1 in the sense of claim 6 or claim 7.

Instead, by letter of 25 March 2014 (pages 19 and 20) the appellant presented inventive-step attacks in writing starting from documents D8, D10, D3, D4 and D5.

However, none of D8, D10, D3, D4 and D5 concerns inserts with a toothed cutting edge. Instead, they all relate to inserts with straight cutting edges (see drawings). Hence, for the reasons already explained in respect of the attack against claim 1 starting from D3, the attacks made against claims 6 and 7 fail to

convince the Board that it was obvious to arrive at the subject-matter of these claims.

6.4 Therefore, the subject-matter of independent claims 1 and 5 to 7 involves an inventive step.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent in amended form on the basis of the following:

Description:
Columns 1 and 2 as filed during oral proceedings and columns 3 to 6 of the patent as granted.

Claims:
1 to 10 of auxiliary request 3 as filed with letter dated 17 August 2016.

Drawings:
Figures 1 to 17 of the patent as granted.

The Registrar: The Chairwoman:

C. Moser P. Acton

Decision electronically authenticated