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D E C I S I O N
of 18 April 2001

Case Number: T 0934/99 - 3.2.2

Application Number: 92118188.9

Publication Number: 0594875

IPC: C23C 30/00

Language of the proceedings: EN

Title of invention:

Multilayer coated hard alloy cutting tool

Patentee:

MITSUBISHI MATERIALS CORPORATION

Opponent:

Sandvik AB

Headword:

-

Relevant legal provisions:

EPC Art. 99

EPC R. 55(c), 56(1)

Keyword:

"Substantiation of opposition, admissibility (yes)"

Decisions cited:

-

Catchword:

-



Case Number: T 0934/99 - 3.2.2

D E C I S I O N
of the Technical Board of Appeal 3.2.2
of 18 April 2001

Appellant: Sandvik AB
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Decision under appeal: Interlocutory decision of the Opposition Division
of the European Patent Office posted 19 July 1999
rejecting the opposition filed against the
European patent No. 0 594 875 as inadmissible on
the basis of Rule 56(1) EPC.

Composition of the Board:

Chairman: W. D. Weiß
Members: R. Ries
R. T. Menapace

Summary of Facts and Submissions

- I. The mention of the grant of European Patent No. 0 594 875 (application No. 92 118 188) was published on 12 March 1997. On 11 December 1997 a notice of opposition to said patent was filed and the opposition fee was paid.
- II. By decision posted on 19 July 1999 the Opposition Division rejected the aforementioned opposition as inadmissible (Rule 56(1) EPC).
- III. According to the analysis given in the decision under appeal the patent opposed relates to a coated hard alloy cutting tool comprising
- (a) a WC substrate material (12) containing Co and comprising Co-enriched surface layers and a core,
 - (b) the maximum values of Co concentration occurring within a surface layer region of 50 μm from an external surface of said substrate material (12) is less than 15 wt-%,
 - (c) a plurality of hard coatings formed on said substrate.
 - (d) the tensile residual strength in the primary coating (13) is not more than 30 kg/mm^2 ,
- said cutting tool being characterized in that
- (e) said surface layer region being substantially free of carbides of Ti, Ta and Nb containing W; the carbonitrides of Ti, Ta or Nb containing W; and

the nitrides of Ti, Ta and Nb containing W;

(f) said plurality of surface coatings consisting essentially of

(f1) a primary coating (13) of TiCN deposited on said surface layer,

(f2) a secondary coating (14) of Al₂O₃ deposited on said primary coating (13), and

(f3) a surface coating (15) consisting essentially of at least one coating of TiCN and TiN deposited on said secondary coating (14) of Al₂O₃.

IV. The notice of opposition did not deal in detail with lack of novelty alleged therein; this ground of opposition was dropped later. As to the second ground alleged by the opponent, namely that the patent opposed does not involve an inventive step, the notice of opposition contains detailed and extensive submissions. Nine prior art documents were cited, four of them (D1, D2, D5 and D6) in a specific manner (column, line/figure/abstract). The line of argument presented can be summarized as follows:

The opposed patent relates to a coated cemented carbide with a surface zone below the coating enriched in binder phase. There are essentially two types of such binder phase zones. One, the slow solidification type, is known for example from D3. The other type ("gamma phase dissolution" because the zone is essentially free of gamma phase) is disclosed in documents D1, D2 and D9. According to D1, column 3, lines 26 to 28 the gamma phase-free zone is obtained by vacuum sintering a

cemented carbide containing small amounts of up to 2 wt-% of a hydride, nitride, carbonitride of group IV or VB elements (see column 3, lines 20 to 21). D2 is similar, but in this case nitrogen is introduced during sintering (see Abstract); by this, equally a gamma phase depleted zone is obtained, the binder phase enrichment of the opposed patent belonging to this latter type. Since D 1 discloses the Co-enriched zone free of gamma phase which is obtained by sintering a nitrogen-containing cemented carbide and thus nitrides are present in the substrate, the binder phase enriched substrate of claim 1 is known from D3. The same document further discloses the coating of that substrate with wear-resistant layers such as carbides, nitrides of metals as from group IVa and Al_2O_3 , and D5 (and D8) shows a cemented carbide with a three-layer coating consisting in carbonitride of a metal selected from group IVb, Al_2O_3 and a nitride of a metal from group IVb (in that order) as (features f1 to f3 in) claim 1. D 7 shows a residual stress in a TiN layer deposited on a cemented carbide of less than 0.5 kg/mm² which is obtained by shot peening. D4 discloses a treatment by shot peening and that as a result of that treatment cracks are formed in the coating indicating a lower tensile strength. As a result, claim 1 of the patent-in-suit lacks inventive step.

As regards dependent claims 2 to 13 it is explained in the notice of opposition that in view of the cited documents either their subject matter is anticipated/known (claim 2 - D7, claims 12, 13 - D1), or they do not contain patentable subject matter (claims 3, 5 to 7), or they lack inventive step (claims 8, 9 - D6, claims 10, 11 - D5).

- V. The issue of admissibility of the opposition was not brought up before the oral proceedings, either by the patent proprietor in his submissions dated 19 May 1998 and 2 June 1999, or by the Opposition Division in its communication of 23 December 1998.
- VI. It was only at the oral proceedings held on 15 June 1999 that the Division indicated its doubts as to the admissibility. This issue alone was then discussed during the oral proceedings which ended with the rejection of the opposition as inadmissible for lack of substantiation within the meaning of Rule 56(1) EPC.
- VII. The following reasons for that finding were given in the written decision:

Since the Opponent has not submitted any arguments against novelty of the (sole) independent claim 1 within the nine-month opposition period, he should have at least submitted grounds for the alleged lack of inventive step.

To this end he should have followed the instructions of the Guidelines C-IV, 9 "Inventive step", and in particular, in view of the problem and solution approach which should normally be applied, he should have identified the closest prior art. As he has not done so, it was not possible to the Opposition Division to establish without its own independent investigations, whether or not the claimed invention would have been obvious to the skilled person (pts. 2.4-6 of the reasons for the decision).

Furthermore, no logical line of reasoning has been presented. The Opponent's statements in the notice of

opposition as regards the type of the binder phase enriched zone are contradictory (stratified layer according to D3 or a gamma phase dissolution as disclosed in D1 and D2?).

The opposition division undertook "on its own motion" to identify the closest prior art among the documents cited by the Opponent; however, an analysis of the documents D1 to D3 shows as their general teaching that a carbide layer should exist between the Co-enriched layer and the primary layer of the plurality of surface coatings; none of these documents even gives a hint as to the essential requirement of not having Ti, Ta and Nb containing W carbides layer underneath said primary layer.

Also from the fact that despite the length of the most relevant cited documents no particular passage has been indicated, and no hint as to the essential feature as defined above had been given, it is to be concluded that the opposition is not adequately substantiated.

VIII Notice of appeal was filed on 16 September 1999 by the Opponent (Appellant) and the appeal fee was paid on the same day.

IX. In the statement of grounds for the appeal which was received on 26 November 1999 the Appellant submitted that the notice of opposition in fact is structured in a clear manner which allows verification of the chain of arguments presented by the Appellant. The presentation of the documents, the relevant parts cited and their combination in the notice of appeal were such as to enable the Opposition Division to examine the alleged ground for revocation in a final way and

without recourse to its own investigations. Since there is no doubt as to the publication date of the cited documents, decision T 522/94 is not relevant for the present case. There is no need either to search for further documents because the content of those cited is self-explanatory and, as regards an inventive step, it is sufficient to read a few documents without needing undue effort.

- X. The Appellant requested setting aside the impugned decision of the Opposition Division.

The Respondent (Patentee) requested dismissal of the appeal and submitted arguments in support thereof by letter received on 14 November 2000.

Both parties have made an auxiliary request for oral proceedings. The Respondent's representative, by letter dated 20 March 2001, did not maintain his request for oral proceedings if the Board on the occasion of the oral proceedings only intended to discuss and decide upon the admissibility of the opposition.

Reasons for the Decision

1. The appeal is admissible.
2. In view of the Respondent's declaration regarding the request for oral proceedings (pt. IX of the facts, above) and the outcome of the appeal which is in favour of the opponent (see below) the present case can be decided without holding oral proceedings.

3. The purpose of the third requirement of Rule 55(c) EPC (in combination with the first and second requirement of that Rule) is to ensure that the notice of opposition contains a sufficient indication of the relevant facts, evidence and arguments for the reasoning and merits of the opponent's case in relation to the grounds of opposition relied upon to be properly understood by the opposition division and the patentee (see eg. T 222/85), on the assumption of course, that both are reasonably skilled in the art to which the opposed patent relates (T 925/91). More specifically, the term "indication" in Rule 55(c) EPC means that the content of the notice of opposition must be such that the patentee is able to understand from it the case that was being made against his patent, if to this end he makes those efforts, including a certain amount of interpretation, which can normally be expected from a person skilled in the art (see decision T 199/92).

4. Furthermore and in line with the foregoing, the question whether a particular notice of opposition meets the minimum substantive requirements under Rule 55(c) EPC has to be decided in the context of each individual case, since various relevant factors, such as the complexity of the issues raised, vary from case to case (see eg. decisions T 2/89, T 261/91) and, in general, compliance with Article 99(1) and Rule 55(c) EPC does not depend only on the fulfilment of certain formal and/or structural requirements.

5. Thus there exists no requirement, either in fact or in law, that the opponent when submitting his grounds for opposition had to apply the problem solution approach which, according to the Guidelines for the Examination in the European Patent Office C-IV, 9.5, is normally

applied by the examiner when assessing inventive step and comprises, as a first step, the determination of the closest state of the art. Even less can insufficiency of grounds be based on the reasoning that because the "opponent in his notice of opposition failed to determine the closest prior art and the technical problem to be solved it was not possible for the Opposition Division to establish whether or not the claimed invention, starting from the closest prior art and the technical problem, would have been obvious to the skilled person, without its own independent investigations" (pt. 2.6 of the reasons for the decision under appeal). Clearly, it is the Opposition Division's responsibility to make, on condition that the opposition is admissible, its own independent assessment of the prior art which has been introduced into the proceedings by the opponent or otherwise, both as to its relevance and as to the conclusions to be drawn from it in respect of the validly raised grounds for opposition, eg. lack of inventive step as in the present case. This task cannot be left to the opponent and, therefore, cannot constitute a precondition for the admissibility of an opposition. Neither is the assessment of prior art to be considered "own investigations" by the Opposition Division; rather it belongs to the examination of the opposition as to its merits which has to be carried out on the basis of the established facts and of the arguments of both sides.

6. It also follows from what has been said above, that Rule 55(c) EPC does not imply the requirement of a logical line of reasoning in the sense that the arguments brought forward in the notice of opposition must be cogent or convincing. Rather, the criterion is

whether the arguments presented are relevant and, where necessary as the result of a reasonable interpretive effort, specific enough for allowing a person skilled in the art to form a reasoned opinion of whether the line of reasoning on which the opponent apparently relies is (logically) correct ("convincing") or not (i.e. wrong). That this was the case here becomes evident if one takes the approach set out above, in particular by actively trying to understand the opponent's submissions in their context including the content of the documents cited by him as objectively understood by a person skilled in the art (see below).

This view is supported by the fact, that the Opposition Division found itself in a position to form an opinion on the arguments presented by the opponent, namely that they did not constitute a "logical line of reasoning" - viz. they were illogical and thus not convincing - because of a blatant contradiction between the opponent's statements in the second and third paragraph of the written grounds for the opposition (on which finding the Board does not comment further, of course, at this stage of the proceedings).

A further indication may be seen in the fact that the objection of inadmissibility was raised by the Opposition Division only during the oral proceedings, not in the foregoing communication and not by the patentee in his reply to the notice of opposition received on 19 May 1998, where he submitted detailed and extensive (six pages!) counterarguments in respect of the merits of the opponent's submissions in the notice of opposition. It is hard to imagine that he could have done this if he had been confronted with a really unsubstantiated opposition. The same is true for

the communication issued by the Opposition Division in preparation of the oral proceedings which set out why and on the basis of which documents (D1, D2 and D3, actually) inventive step would have to be discussed.

7. Similar considerations apply to the further reason given for the rejection of the opposition as inadmissible, namely that despite the length of the most relevant documents no particular passage had been indicated and no hint pointing to the essential features, as identified by the Opposition Division in the decision under appeal, had been given in the notice of opposition.

Again, and apart from this finding being simply not true, in that the notice of opposition actually does identify several passages by column and lines in documents cited, there is no legal or factual requirement to identify a particular part of a document referred to as state of the art in a notice of opposition; rather, this depends on the length and the structure of the document on the one hand, and on the context in which it is cited, on the other hand. Taking all relevant aspects together, including the length and structure of the documents concerned - all but one being patent applications or patent specifications of normal length and containing an abstract - and the effort to understand these documents in the light of the opponent's submissions as can be expected from a person skilled in the art, it cannot be maintained that in the present case the identification of the relevant parts of the cited documents was insufficient and the notice of opposition was therefore deficient. Also this finding is corroborated by the patentee who was able to file an extensive response based on a detailed analysis

of the documents referred to in the notice of opposition; the communication issued in preparation of the oral proceedings does not give the slightest hint that at that time the Opposition Division had any doubts in this respect.

Moreover, in the decision under appeal itself (pt. 2.7) the Division undertook "on its own motion" to sort out and to analyse the most relevant documents and came to the conclusion that "none of these documents gives a hint to the essential requirement of not having Ti, Ta and Nb containing W carbides layer underneath said primary layer" and that "in contrast with the current case, the general teaching of these prior art documents is that a carbide layer should exist between the Co-enriched layer and the primary layer of the plurality of surface coatings". This is nothing else than a conclusion as to the merits of the opposition which could not and should not have been drawn, had it really been impossible to identify the relevant content of these documents which were relied upon in the notice of opposition.

Last but not least and most obviously, it is impossible for the opponent to forecast precisely which feature will later be found to be decisive by the Opposition Division; there is neither the need nor an obligation, that he points to that feature or those features already in the notice of opposition. Thus, contrary to what one could understand from pt. 3.1 of the reasons for the decision under appeal, inadequate substantiation of an opposition cannot be based on the absence of a specific indication by the opponent of those features which in the Opposition Division's view are essential for deciding on the opposition.

8. The opposition under consideration complies with all other provisions mentioned in Rule 56(1) and (2) EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The opposition underlying the decision under appeal is admissible.
3. The case is remitted to the first instance for further prosecution.

The Registrar:

The Chairman:

V. Commare

W. D. Weiß