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**Datasheet for the decision
of 29 January 2026**

Case Number: T 0420/24 - 3.2.07

Application Number: 16849840.0

Publication Number: 3352956

IPC: B26D1/36, B26D1/40, A23N15/00,
B26D7/01, B26D5/06, B26D1/00

Language of the proceedings: EN

Title of invention:
SLICING MACHINES, KNIFE ASSEMBLIES, AND METHODS FOR SLICING
PRODUCTS

Patent Proprietor:
URSCHEL LABORATORIES, INC.

Opponent:
FAM N.V.

Headword:

Relevant legal provisions:
EPC Art. 54, 84, 100(a)
RPBA 2020 Art. 12(4), 12(6)

Keyword:

Novelty - main request (no)

Claims - clarity - auxiliary request (no)

Late-filed requests - should have been submitted in first-
instance proceedings (yes)

Amendment to case - reasons for submitting amendment in appeal
proceedings (no)

Decisions cited:

G 0001/24

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 0420/24 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 29 January 2026

Appellant: URSCHEL LABORATORIES, INC.
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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
17 January 2024 concerning maintenance of the
European Patent No. 3352956 in amended form.**

Composition of the Board:

Chairman G. Patton
Members: S. Watson
S. Ruhwinkel

Summary of Facts and Submissions

I. An appeal was filed by the patent proprietor against the decision of the opposition division maintaining European patent No. 3 352 956 in amended form according to the then second auxiliary request.

II. The opposition division found that the ground for opposition under Article 100(a) EPC, with Article 54 EPC, prejudiced the maintenance of the patent as granted. The first auxiliary request was found not to meet the requirements of Article 84 EPC.

III. The following document which formed part of the decision under appeal is referred to in this decision:

D1: US 4,937,084.

IV. In preparation for oral proceedings, the board gave its preliminary opinion in a communication pursuant to Article 15(1) RPBA, dated 11 September 2025. The preliminary opinion of the board was that the appeal was likely to be dismissed.

Neither party made any written submissions in response to the board's preliminary opinion.

V. Oral proceedings before the board took place on 29 January 2026. At the conclusion of the proceedings the decision was announced.

Further details of the oral proceedings can be found in the minutes.

VI. The final requests of the parties are as follows.

The patent proprietor ("appellant") requested that

- the decision under appeal be set aside,
- the patent be maintained as granted (main request) or in amended form on the basis of one of the sets of claims of the first to sixth auxiliary requests, filed with the statement of grounds of appeal, whereby the sixth auxiliary request is the same as the request which the opposition found to meet the requirements of the EPC,
- the case be remitted to the opposition division should the board find any request to be novel.

The opponent ("respondent") requested that

- the appeal be dismissed, and
- should a request be found to be novel, that the case not be remitted to the opposition division for the discussion of inventive step.

VII. Claim 1 of the patent as granted (main request) reads as follows, the numbering is that used in the decision under appeal and by the parties in their submissions.

A "A knife assembly (134) comprising:
B a corrugated knife (126) having
B1 oppositely-disposed first and second surfaces (129, 131) terminating at a cutting edge (127),
B11 the cutting edge (127) and at least portions of the first and second surfaces (129,131) adjacent thereto being characterized by a pattern of peaks and valleys;
C a knife holder (130A, 130B) having
C1 a registration surface (142A, 142B) and
C2 an oppositely-disposed knife seat (144A,144B)
C21 configured to mate with the first surface (129) of the corrugated knife (126), the knife seat

(144A,144B) comprising

- C22** a pattern of peaks and valleys complementary to the pattern of peaks and valleys in the first surface (129) of the corrugated knife (126),
- C3** the knife holder having a leading edge beyond which the corrugated knife and the cutting edge thereof project; and
- D** means (132A, 132B; 152) for securing the corrugated knife (126) to the knife seat (144A,144B) of the knife holder (130A,130B), the securing means (132A, 132B; 152) comprising
 - D1** a member (132A,152) having fingers (148,158) and notches therebetween that
 - D11** define a pattern complementary to the pattern of peaks and valleys in the second surface (131) of the corrugated knife (126), characterized in that
 - D12** the fingers (148,158) of the member (132A,152) engaging the valleys on the second surface (131) of the corrugated knife (126) and
 - D13** protruding beyond the leading edge of the knife holder to reduce a cantilevered beam length of the corrugated knife."

VIII. Claim 1 of the first auxiliary request has an amendment in feature C3 which reads as follows (amendments shown with respect to the main request):

"the knife holder having a leading edge at a distal extremity thereof beyond which the corrugated knife and the cutting edge thereof project; and..."

IX. The arguments of the parties relevant for the decision are dealt with in detail below.

Reasons for the Decision

1. *Main request - claim 1 - novelty (Articles 100(a) and 54 EPC)*
 - 1.1 The opposition division found that all features of claim 1 as granted (main request) were disclosed in document D1 (see decision under appeal, II.12.3.2).
 - 1.2 The appellant contested this finding and argued in its statement of grounds of appeal that features D1, D12 and D13 were not directly and unambiguously disclosed in document D1.
 - 1.3 The appellant stated that the clamping members 34 and 38 of document D1 were regarded for the sake of argument as equivalent, respectively, to the knife holder and member of the securing means of claim 1 of the main request (features C and D). As the appellant did not give any reasons why the clamping members 34 and 38 should not be regarded as the knife holder and securing means member, the board understands the disclosure of these features in document D1 to be undisputed.
 - 1.4 The appellant contended that the opposition division had incorrectly interpreted the term "leading edge of the knife holder" and also relied on ambiguous features found only in the drawings of document D1. The first part of feature D13 was thus not directly and unambiguously disclosed in document D1.

Further, according to the appellant, even if document D1 were to be understood as disclosing fingers protruding beyond the leading edge of the knife holder, document D1 still did not disclose any reduction of the

cantilevered beam length of the knife as the opposition division had not correctly interpreted this term. Therefore at least the second part of feature D13 was in any case not disclosed.

1.5 The board did not find the appellant's arguments convincing for the following reasons.

1.5.1 *Interpretation of "leading edge of knife holder"*

The opposition division construed the term "leading edge of the knife holder" as a "*continuous line forming the distal boundary of the knife holder*" (see decision under appeal, page 12, penultimate paragraph).

The appellant argued that the term leading edge of the knife holder would be understood by the skilled person as referring only to the distal tips of the fingers 52 of clamping means 34 and not additionally to the notches found between the fingers (see D1, figure 4). The appellant defined the leading edge in its statement of grounds of appeal as "*the furthestmost edge which is the clamping edge, as noted in paragraph [0008] of the application as filed. These edges, for all components, those which may come into contact with orbiting products in the cutting machine*" (see statement of grounds of appeal, page 15).

The appellant also referred to paragraphs [0010], [0029] and [0030] of the application as filed as well as passages in document D1 (column 2, lines 25 to 39 and column 5, lines 6 to 15, 19 to 24 and 46 to 53).

1.5.2 The board, however, is of the view that the opposition division was correct to find that the skilled person would understand the term "leading edge" of the knife

holder as the continuous line forming the distal boundary of the knife holder.

The appellant referred to paragraph [0008] of the application as filed which corresponds to paragraph [0007] of the patent as granted. Here "leading edge" is referred to for the knife clamp 32 of the prior art. This paragraph states that "*the knife clamp 32 has a simple arc on its leading (clamping) edge to clamp the knife against the knife holder*". The board notes that this passage refers to a knife holder having a specific form but does not give any indication on how the term "leading edge" should be understood for a more complex knife holder shape.

In paragraphs [0029] and [0030] of the application as filed (paragraphs [0022] and [0023] of the contested patent), the leading (cutting) edge of the knife is referred to, as well as the leading edges of the holder 30 and the clamp 32, but there is again no indication that the term "leading edge" should be understood as set out by the appellant.

Paragraph [0010] of the application as filed refers only to the leading edge of the knife itself (paragraph [0009] of the contested patent), and again gives no indication of how a knife holder leading edge is to be understood.

As the respondent argued, the contested patent describes the leading edge of knife holder 130B as having a pattern (paragraph [0024] and figure 9B) whereby some parts of the edge are more towards the front than other parts but the whole edge is referred to as the leading edge.

Regarding document D1, as the respondent argued, leading edge is used in D1 to refer to single leading edges with a wave shape as well as to the product being cut (potato).

Even after consulting the description, the skilled person therefore has no reason to understand the term "leading edge" in the restrictive manner suggested by the appellant. Generally, an edge would be understood by the skilled person as a continuous line, so the board finds the opposition division's interpretation of the leading edge of the knife holder to be reasonable.

This leads the board to conclude that the leading edge of the knife holder in D1 (clamp 34) continues along all parts of the fingers, including the notches.

1.6 *Features D12 and part of D13 - "fingers of the member engaging the valleys on the second surface of the corrugated knife and protruding beyond the leading edge of the knife holder..."*

1.6.1 The opposition division relied on figure 4 of document D1 and reasoned that this figure disclosed that fingers 56 engage the valleys of the second surface of the knife and protrude beyond the leading edge of the knife holder 34, using the opposition division's interpretation of "leading edge" (see decision under appeal, paragraph bridging pages 12 and 13).

1.6.2 The appellant argued that the opposition division was incorrect as the drawings of document D1 were not to scale so that no lengths or sizes could be inferred, the relevant components were not clearly shown, and the technical function claimed was not derivable from the drawings. This meant that the relevant features were

not immediately apparent to the skilled person and could not be considered directly and unambiguously derivable.

In the view of the appellant, even if the opposition division's interpretation of "leading edge" were to be used, there was no direct and unambiguous disclosure of feature D13 as it was possible that the fingers of the clamping members 34 and 38 in document D1 had no overlap at all, i.e. that the fingers were completely offset from one another on the opposite sides of the knife.

- 1.6.3 The board however comes to the conclusion that figures 4 and 5 together with the relevant passages of the description of document D1 cited by the respondent do disclose that the fingers 56 of the securing means member 38 protrude beyond the leading edge of the knife holder 34, as the fingers 56 protrude at least beyond the notches of the knife holder leading edge.

Although the decision under appeal explicitly refers only to figure 4, the opposition division clearly also considered the description and other drawings of D1 when considering the figure, otherwise they would not have been able to comment on what was shown in figure 4, for example that reference sign 30 represents a corrugated knife (see decision under appeal, II.12.3.2).

The skilled person considering document D1, reads that there can be *"inner and outer clamping members, both having a plurality of tapered fingers extending into the grooves on one side or other of the knife to grip the knife firmly therebetween"* (see D1, column 3, lines 20 to 24) and that *"the fingers matingly engage the*

grooves on opposite sides of the knife, extending towards the cutting edge of the knife but terminating short thereof. As shown in FIGS. 4 and 5, the fingers taper to thin tips which rest flush against the bottom of the grooves (...). The fingers also serve rigidly to support both sides of the knife along most of its length" (see D1, column 6, lines 1 to 14).

These passages clearly disclose that the securing means member 38 has fingers with notches therebetween (feature D1), whereby the fingers 56 engage the valleys (grooves in the language of D1) on the second surface of the knife 30, as required by feature D12. This passage also discloses that the knife 30 is firmly gripped between the fingers 52, 56 as the fingers extend into the grooves on opposite sides of the knife and grip it firmly therebetween. The interpretation suggested by the appellant, where the fingers of one clamp are offset from the other fingers, so that they are opposite the base part of the other clamp is therefore not disclosed in document D1, as the disclosure of D1 requires the knife to be firmly gripped between the fingers of the first clamping member on one side and the second clamping member on the other side. This understanding of the disclosure of D1 is confirmed by figures 4 and 5 which also show that the fingers 56 of the securing means member 38 protrude at least beyond the notches of the knife holder 34, as required by the first part of feature D13.

1.7 *Feature D13 - "...to reduce a cantilevered beam length of the corrugated knife"*

1.7.1 The opposition division used the definition of cantilevered beam length defined in the contested patent (paragraph [0026], column 8, lines 27 to 37 of

the contested patent). It found that the cantilevered beam length in D1 started from the distal tip of finger 56 of clamp 38 (securing means member), as this was the nearest adjacent extremity of the securing means member applying a clamping load (see decision under appeal, page 13, first complete paragraph).

The board understands the opposition division to mean that this length is reduced in D1 when compared to using only clamp 34 (knife holder) at this point on the knife (see decision under appeal, page 9, first paragraph, final sentence).

- 1.7.2 The appellant argued that the opposition division were incorrect in rigidly applying the definition of the term "cantilevered beam length" given in the description of the contested patent to the prior art.

The opposition division's interpretation of the definition would result in the conclusion that any protrusion of a securing means member (D1, 38) over any part of a knife holder (D1, 34) led to a finding of a reduction in cantilevered beam length.

The appellant argued that the skilled person would understand that the nearest adjacent extremity would be considered to be whichever of the extremities of either the securing means member (in D1, fingers 56 of clamp 38) or the knife holder (in D1, fingers 52 of clamp 34) was closer to the knife cutting edge, not necessarily the securing means member.

- 1.7.3 The relevant part of paragraph [0026] of the contested patent reads as follows:

"Alternatively or in addition, the fingers 148 may improve the stability of the leading edge of the

knife 126 by reducing the cantilevered beam length of the knife 126, which as used herein refers to the length or distance between the cutting edge 127 of the knife 126 and the nearest adjacent extremity of the clamp 132A applying a clamping load to the knife 126. In this case, the nearest adjacent extremity of the clamp 132A is defined by the distal ends of the fingers 148..."

According to the Enlarged Board of Appeal in decision G 1/24, the description and drawings shall always be consulted to interpret the claims when assessing patentability of an invention under Articles 52 to 57 EPC.

The appellant argued at the oral proceedings before the board that the definition in the contested patent was only intended to be understood in relation to the specific embodiment referred to, where the securing means member was the part closest to the knife edge. However, in the board's view the use of the phrase "*which as used herein refers to*" indicates that the definition is a general definition.

The board therefore agrees with the opposition division that the skilled person when interpreting the term "cantilevered beam length" would take into account the clear definition given in paragraph [0026] of the description of the contested patent.

- 1.7.4 At the oral proceedings before the board, the appellant acknowledged that the claim only referred to the reduction of "a cantilevered beam length", but argued that the skilled person would understand that the cantilevered beam length for the knife as a whole was intended, and not for local points on the knife. The

board is of the view that the scope of claim 1 includes the reduction of cantilevered beam length at a localised point on the knife.

As the knife holder leading edge is understood to include the notches between fingers 52 in document D1, fingers 56 protrude beyond them due to the position of the fingers in the valleys on each side of the knife. The cantilevered beam length at this point of the knife is then reduced compared to the knife holder alone, as the respondent argued.

- 1.7.5 The appellant argued further that D1 did not disclose the technical function of a reduction of the cantilevered beam length.

The board however agrees with the respondent that D1 discloses that one purpose of the fingers is to increase knife stability and the skilled person understands the relation between reduction in cantilevered beam length and increased stability.

In any case, as the structural features of D1 locally reduce the cantilevered beam length as discussed above, the feature is considered to be inherent from the disclosure of D1.

- 1.8 The board therefore concludes that the appellant has not convincingly demonstrated that the decision under appeal is incorrect with respect to the main request.

2. *First auxiliary request - claim 1 - Article 84 EPC*

- 2.1 The opposition division found that the introduction of the term "distal extremity thereof" made claim 1 unclear so that the requirements of Article 84 EPC were

not met. The opposition division reasoned that the term "leading edge" of an object already implied a distal extremity of that object so that the skilled person was unable to determine what limitation was intended by the additional term (see decision under appeal, II.13.2).

- 2.2 The appellant argued that claim 1 of the first auxiliary request did not lack clarity because the skilled person would understand that the term "distal extremity" was a further distinction in instances where a leading edge could cover something not at the distal edge of a component (see statement of grounds of appeal, page 25).
- 2.3 The board is of the view that the term as used in claim 1 of the first auxiliary request renders the claim unclear. Feature C3 requires the knife holder to have a leading edge, if the appellant's interpretation were followed, for example, in the knife holder in document D1, the skilled person would identify many leading edges, one at the end of each finger, but would not be able to determine which of the fingers contained the leading edge nor at which point the distal edge of the knife holder would no longer be deemed a leading edge, i.e. where the "distal extremity" would start and finish.
- 2.4 The appellant has therefore not convincingly demonstrated that the decision under appeal was incorrect with respect to the first auxiliary request.

3. *Second and third auxiliary requests - admittance (Article 12(6) RPBA)*
- 3.1 The second and third auxiliary requests were filed for the first time with the appellant's statement of grounds of appeal.
- 3.2 The respondent requested that these requests not be admitted by the board as both requests could and should have been filed before the opposition division.
- 3.3 According to Article 12(6), second sentence, RPBA, a board should not admit requests which should have been submitted in the proceedings leading to the decision under appeal, unless the circumstances of the appeal case justify their admittance.
 - 3.3.1 The appellant argued that the opposition division's change of opinion at the oral proceedings, regarding novelty of the subject-matter of claim 1 of the main request, took it by surprise and it was only with the written decision that the appellant was able to understand the reasoning and react appropriately.
 - 3.3.2 A lack of novelty objection with respect to the disclosure of D1 was raised by the respondent in its notice of opposition (see notice of opposition, paragraphs 51. to 57.).

The opposition division was of the preliminary opinion that although the fingers of the securing means member protruded beyond the leading edge of the knife holder, the cantilevered beam length was not reduced (see annex to the summons to oral proceedings before the opposition division, point 8.1).

The respondent replied to the preliminary opinion and gave further arguments why, in its view, the opposition division was incorrect in its opinion relating to the cantilevered beam length, in particular when considering the definition for this feature given in the contested patent (see respondent's submissions of 12 October 2023, page 13).

At the oral proceedings before the opposition division, after further discussion of the objection of lack of novelty of document D1, the opposition division changed its opinion and found that D1 did disclose all features of claim 1 of the main request (see minutes of oral proceedings, page 2).

After the opposition division's change of opinion the appellant was given time to consider how to react (see minutes of oral proceedings, page 2).

- 3.3.3 In the board's view nothing surprising appears to have occurred at the oral proceedings. The objection of lack of novelty against the subject-matter of claim 1 of the main request had been present throughout the opposition proceedings. Although the opposition division had given a favourable opinion on novelty with respect to D1, only one feature had been regarded as the distinguishing feature. The respondent had reacted to the preliminary opinion with further arguments submitted in writing, in particular regarding this feature. The appellant must have been aware that the opposition division might alter its opinion on this point, in light of the respondent's submissions.

The opposition division did in fact alter its opinion but the appellant was given time to consider and react to this change of opinion, which it did by re-ordering

its auxiliary requests, one of which was then found to meet the requirements of the EPC.

The board therefore is of the view that there are no circumstances in the present case which justify the admittance of the new second and third auxiliary requests and these requests are therefore not admitted into the appeal proceedings.

4. *Fourth and fifth auxiliary requests - admittance - Article 12(4) RPBA*

4.1 The fourth and fifth auxiliary requests in appeal were filed as third and fourth auxiliary requests with the appellant's reply to the notice of opposition and became fourth and fifth auxiliary requests at the oral proceedings before the opposition division.

They were therefore lower ranking requests than the second auxiliary request which was found by the opposition division to meet the requirements of the EPC.

The order of the requests in the proceedings leading to the decision under appeal was different to the order now presented in appeal proceedings. The opposition division were therefore not in a position to decide on the fourth and fifth auxiliary requests. This re-ordering of the requests constitutes an amendment to the appellant's appeal case within the meaning of Article 12(4), first sentence, RPBA.

4.2 The appellant had the opportunity at the oral proceedings before the opposition division to place these requests before the then second auxiliary request in order to have a decision on them. The appellant

however chose to have the second (now sixth) auxiliary request considered first.

If these requests were admitted into the appeal proceedings the board would have to either decide for the first time on these requests, contrary to the principles set out in Article 12(2) RPBA, or to remit the case to the opposition division for consideration of these requests, which would be detrimental to procedural economy. The requests are therefore not admitted into the appeal proceedings.

5. *Sixth auxiliary request*

The sixth auxiliary request is identical to the request found by the opposition division to meet the requirements of the EPC. The respondent did not appeal the decision, so the board cannot consider this request in the appeal proceedings.

6. *Conclusion*

As the main and first auxiliary requests are not allowable; the second to fifth auxiliary requests are not admitted into the appeal proceedings and the sixth auxiliary request is identical to the request found by the opposition division to meet the requirements of the EPC and is therefore not considered by the board, the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



G. Nachtigall

G. Patton

Decision electronically authenticated