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**D E C I S I O N**  
**of 18 December 2002**

**Case Number:** T 0353/00 - 3.2.4

**Application Number:** 93201618.1

**Publication Number:** 0573125

**IPC:** A23N 7/02

**Language of the proceedings:** EN

**Title of invention:**

Device for reducing peelable products such as potatoes in size to a predetermined shape

**Patentee:**

BACKUS BEHEER B.V.

**Opponent:**

Oy FORMIT Foodprocessing Ab

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 56

**Keyword:**

"Inventive step - yes"

**Decisions cited:**

-

**Catchword:**

-



Case Number: T 0353/00 - 3.2.4

**D E C I S I O N**  
**of the Technical Board of Appeal 3.2.4**  
**of 18 December 2002**

**Appellant:** Oy FORMIT Foodprocessing Ab  
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**Representative:** Görg, Klaus, Dipl.-Ing.  
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**Respondent:** BACKUS BEHEER B.V.  
(Proprietor of the patent) Laurens Janszoon Costerstraat 16  
NL-5916 PS Venlo (NL)

**Representative:** Bleukx, Lucas Lodewijk M.  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 11 February 2000  
rejecting the opposition filed against European  
patent No. 0 573 125 pursuant to Article 102(2)  
EPC.

**Composition of the Board:**

**Chairman:** C. A. J. Andries  
**Members:** M. G. Hatherly  
C. Holtz

## Summary of Facts and Submissions

I. The opposition division's decision rejecting the opposition against European patent No. 0 573 125 was posted on 11 February 2000.

On 30 March 2000 the appellant (opponent) filed an appeal and paid the appeal fee. The statement of grounds was filed on 16 May 2000.

II. Claim 1 as granted reads:

"Device for reducing peelable products (P) such as potatoes in size to a predetermined shape, consisting of at least one pair of mutually parallel rotatably driven reducing elements (1,2), the outer surface of each of which has at least one constriction (7) such that two oppositely situated constrictions (7) form a passage opening (9) between the elements (1,2) for the reduced product (P), **characterized in that** the constriction in the outer surface of each reducing element is defined by knife-like protrusions (11;12;13) comprising cutting surfaces for cutting the products (P) to the predetermined shape."

III. The following documents played a role in the appeal proceedings:

D1: DE-C-3 426 510

D2: Kartoffeln: Züchtung - Anbau - Verwertung,  
Dr Bernd Putz, Behr's Verlag, 1989, ISBN  
3-925673-45-8, title page and pages 211 to 216

D3: US-A-3 156 276

D4: DE-C-69 821

D6: WO-A-85/04 077

- IV. Both parties attended oral proceedings on 18 December 2002.

During the appeal proceedings the appellant argued that it would be obvious to the skilled person to modify the grinding device of D1 to arrive at the claimed device with knife-like protrusions.

During the appeal proceedings the respondent (patentee) countered the appellant's arguments.

- V. The appellant (patentee) requested that the decision under appeal be set aside and the patent revoked.

The respondent requested that the appeal be dismissed i.e. that the patent be maintained unamended.

### **Reasons for the decision**

1. The appeal is admissible.
2. *Comment on claim 1 as granted*

The claimed device is "for reducing peelable products (P) such as potatoes in size to a predetermined shape" and so is not merely a peeling device that, by peeling the product, reduces its size while retaining approximately the original shape, aiming to achieve a peeled product with a minimum of product wasted. On the contrary, the claimed device is a shaping device that produces a product with a reduced, **predetermined size**

and a **predetermined shape**, regardless of the amount of product removed and thus wasted.

3. D1

3.1 D1 discloses the features in the pre-characterising portion of claim 1 as granted. However while claim 1 specifies **knife-like protrusions** which define the outer surface of the reducing elements, in D1 the surfaces of the reducing elements (rolls 1 and 2) are covered with a **grinding material** e.g. silicon carbide (see column 3, lines 3 to 5 of D1).

3.2 "Cutting" is a generic term encompassing turning, milling, sawing, broaching, grinding etc. Thus grinding is a particular type of cutting and on an academic basis it could be argued that D1 discloses a cutting device. However, on a practical basis, the skilled person draws a difference between cutting (by means of a sharp edge) and grinding (by means of abrasive material). This is all the more the case when seen in the context of the patent and of D1.

The term "knife-like protrusions" in the claim signifies protrusions that are like a knife, i.e. protrusions having the function of a knife, having a longitudinal extent in a predetermined direction, and having cutting edges. On the other hand, although the abrasive grains of a grinding material may be sharp, this is because they have randomly placed points not because they have "knife-like protrusions".

Grinding is an abrasive treatment taking place essentially at the outer surface of the peelable product and removing product material in thin, tiny

pieces. Cutting with knife-like protrusions, on the other hand, is a more intensive process, entering more into the product and removing product material in thicker, larger pieces.

- 3.3 Thus there is a clear difference between the grinding device of D1 and the cutting device with its knife-like protrusions of the present invention.

In the middle of page 2 of the notice of opposition the appellant wrote that "a treatment by grinding and also a treatment by knives ... are in the art considered to be **alternatives**". In the appeal proceedings the appellant has not alleged lack of novelty over D1. Therefore also the appellant recognizes a difference between the cutting with knife-like protrusions of the present invention and the grinding performed by the device of D1.

4. *Novelty - claim 1 as granted*

The board considers that none of the prior art documents on file (including D1 as explained in section 3 above) discloses all the features of claim 1 as granted.

Moreover in the appeal proceedings the appellant did not argue that the subject-matter of claim 1 as granted lacked novelty.

The board thus finds the subject-matter of claim 1 as granted novel (Articles 52(1) and 54 EPC).

5. *Inventive step - claim 1 as granted*

- 5.1 All of the appellant's inventive step arguments are based on it being obvious to replace the grinding material of D1 with knife-like protrusions.
- 5.2 D2 deals with potatoes and the translation of part of the second paragraph of page 213 reads that "Purely mechanical peeling methods are the carborundum and knife peeling. Carborundum peeling machines are mostly formed as pot machines with a capacity of 5 to 40 kg, which work discontinuously. Continually working carborundum peelers are the roll peelers."

The translation of part of the third paragraph on page 213 states that "In continuous roll peelers, closely side-by-side rolls, which turn with adjustable speed, are coated with carborundum. A transport worm lying above transports the potatoes over the rolls."

The translation of part of the second paragraph on page 214 of D2 reads "Knife peeling machines are constructed like carborundum peeling machines, wherein in place of the carborundum coating a multiplicity of small knives are located on the inner wall and base. They are almost only used as pot machines in discontinuous service."

- 5.3 The appellant infers from the words "almost only" in the last sentence above that knife peeling machines need not be pot machines but can be roll peeling machines.

The board disagrees. Referring to the second paragraph on page 214 of D2, it seems that the word "They" in the sentence "They are almost only used as pot machines in discontinuous service" is meant to refer back to "Knife

peeling machines ... constructed like carborundum peeling machines, wherein in place of the carborundum coating a multiplicity of small knives are located on the inner wall and base" i.e. to pot machines. Therefore the "almost only" can only apply to "discontinuous service" leading to the conclusion that the seldom used alternative is pot machines in continuous service.

This interpretation, while grammatically reasonable, does not seem to be technically reasonable, and so the board finds the paragraph to be unclear and self-contradictory. The board cannot accept the appellant's view that it must mean that the rarely used alternative is a roll peeling machine with knives. Obscurities in this cited prior art document cannot be used to the advantage of the (opponent) appellant.

Moreover, even if a roll peeling machine with knives could be inferred from the second paragraph on page 214 of D2 then, as set out in the third paragraph on page 213 of D2, this machine would comprise closely side-by-side rolls with a transport worm lying above to transport the potatoes over the rolls. This would be basically very different to the shaping devices of the present invention and of D1 where the potatoes pass through oppositely situated constrictions in the rolls.

5.4 Thus D2 would not directly teach the skilled person to modify the shaping device of D1 by replacing the carborundum surfaces with knives.

5.5 The respondent argues that the skilled person moreover would be inhibited from such a modification by reading D1 itself since the prior art discussion in column 1,



lines 11 to 41 of D1 states that "Blechmesser" i.e. sheet metal knives are disadvantageous.

The appellant maintains that D1 only says that "Blechmesser" i.e. **sheet metal** knives are disadvantageous and that other knives could be used. He cites Figures 11 to 14 of D6 to show what "Blechmesser" are.

While D6 is not in German and so does not use the word "Blechmesser", it nevertheless discloses a shaping device which is not inconsistent with said prior art discussion in D1.

- 5.6 However, if the appellant is correct that D1 would not actively discourage the skilled person from using knives other than sheet metal knives, then for the obviousness argument to succeed it would still be necessary to show that the skilled person would receive from other sources the hint to modify the grinding device of D1.
- 5.7 As explained in sections 5.2 to 5.4 above such a hint would not come from D2.
- 5.8 The paring tool of D3, as set out in lines 60 to 64 of column 2, has a "diametrically reduced minimum diameter at its mid portion as shown at 36" in Figure 3 and has "longitudinally extending grooves 40" which, as explained in column 2, lines 36 to 38 for Figures 1 and 2, provide peeling or cutting edges.

However this paring tool is to be used alone on its own while held in the hand. Its constriction is not paired with the constriction of an adjacent paring tool and

the vegetable is peeled not shaped (see section 2 above). The board does not consider that D3 would lead the skilled person to modify the very different device of D1.

- 5.9 Even if the respondent is correct, as he stated in the second paragraph on page 2 of his letter of 28 April 1995 and in column 1, lines 40 to 43 of the description of the present patent, that the rasp-like protrusions of Figures 6 to 16 of D4 are knife-like protrusions, the device of D4 is very different to those of D1 and the present invention.

The rollers are coaxial not parallel, the rollers do not interact i.e. only one roller works on a potato. The potato does not go past the roller but as shown in Figure 1 it remains above the roller until the front wall h is lowered. Thus the rasp-like protrusions do not define the constriction and the device does not shape the potatoes, it only peels them.

In view of the above and bearing in mind that D4 is a very old document (patented 100 years before D1), the board does not considered that it would lead the skilled person to modify the device of D1 in the manner postulated by the appellant.

- 5.10 The board thus cannot see that any of the prior art documents relied upon in the appeal proceedings (taken singly or in combination) would lead the skilled person in an obvious manner to the subject-matter of claim 1 as granted.
- 5.11 The board thus finds that the subject-matter of claim 1 as granted is not obvious (Articles 52(1) and 56 EPC).

6. Thus claim 1 as granted of the main request is patentable as are claims 2 to 9 which are dependent thereon. Accordingly the patent can be maintained unamended i.e. as granted.

## **Order**

### **For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:

G. Magouliotis

C. Andries