

Veröffentlichung im Amtsblatt	J/Nein
Publication in the Official Journal	Yes/No
Publication au Journal Officiel	Oui/Non



Aktenzeichen / Case Number / N° du recours : T 80/86

Anmeldenummer / Filing No / N° de la demande : 80 200 421.8

Veröffentlichungs-Nr. / Publication No / N° de la publication : 0 019 333

Bezeichnung der Erfindung: An apparatus for stunning animals to be
Title of invention: slaughtered, such as pigs
Titre de l'invention :

Klassifikation / Classification / Classement : B65G 17/06, A22B 3/06

ENTSCHEIDUNG / DECISION
vom / of / du 6 September 1988

Anmelder / Applicant / Demandeur :

Patentinhaber / Proprietor of the patent /
Titulaire du brevet : Machinefabriek G.J. Nijhuis B.V.

Einsprechender / Opponent / Opposant : Norman S.A.

Stichwort / Headword / Référence : Slaughtering pigs/Nijhuis

EPÜ/EPC/CBE Article 56 EPC

Schlagwort / Keyword / Mot clé : "Inventive step (No)"

Leitsatz / Headnote / Sommaire

Europäisches
Patentamt

Beschwerdekammern

European Patent
Office

Boards of Appeal

Office européen
des brevets

Chambres de recours



Case Number : T 80/86

D E C I S I O N
of the Technical Board of Appeal 3.2.1
of 6 September 1988

Appellant :
(Proprietor of the patent) Machinefabriek G.J. Nijhuis B.V.
Parallelweg 4
NL-7102 DE Winterswijk (NL)

Representative :
Van der Beek, George Frans, Ir. et al.
Nederlandsch Octrooibureau
P.O. Box 29720
NL-2502 LS The Hague (NL)

Respondent :
(Opponent) Norman S.A.
18 Voie Nouvelle du Montparnasse
61120 Vimoutiers (FR)

Representative :
Wagret, Jean-Michel
Propi Conseils
23 rue de Léningrad
F-75008 Paris (FR)

Decision under appeal : Decision of the Opposition Division of the European
Patent Office dated 28 October 1985 (notified
14 January 1986) revoking European patent
No. 0 019 333 pursuant to Article 102(1) EPC.

Composition of the Board :

Chairman : P.E.M. Delbecque

Members : C.T. Wilson

J. Saisset

Summary of Facts and Submissions

- I. European patent No. 0 019 333 was granted with two claims on the basis of European patent application No. 80 200 421.8 on 7 March 1984.

Claim 1 reads as follows:

"An apparatus for stunning animals to be slaughtered, such as pigs, comprising at least one conveyor, said conveyor including two endless conveyor means (1, 1'), said conveyor means being positioned to form a substantially V-shaped passageway therebetween, each one of said conveyor means consisting of endless chains running over reversing wheels at the ends of the conveyors and each provided with plates (15) therebetween, said plates being contiguous with respect to each other at the location of the operating surface (18) and said plates having a dimension in the direction of conveyance which corresponds with the length of a link (12) of the chains, characterised in that said plates (15) are operable to hinge about each other at the edges by means of interengaging curved edge portions (16, 17), said edge portions being concentric with the associated hinge shaft (13) of the chain links (12) and being shaped such that the cylindrical front edge (16) of each plate is covered over part of its front edge surface by the rear edge (17) of the preceding plate, said plates further having a curved outer plane (18) between said edge portions which plate has a curvature such that at the location of each reversing wheel said plate is concentric with the axis (19) of said reversing wheel."

- II. The patent was opposed in due time and form on 5 December 1984. The Opponent requested revocation of the patent on grounds of lack of inventive step in the light of DE-B-1 044 707.

- III. The Patentee contested the arguments of the Opponent and requested dismissal of the opposition and maintenance of the patent unamended.
- IV. By a decision dated 28 October 1985, issued 14 January 1986, the Opposition Division revoked the European patent on grounds of lack of inventive step in the light of NL-A-7 705 519 and DE-B-1 044 707 (incorrectly quoted as DE-A-1 044 707 in the decision).
- V. The Patentee appealed against this decision on 13 February 1986, at the same time paying the appropriate fee. In his Statement of Grounds of Appeal, filed 7 May 1986, the Appellant (Patentee) argues for maintenance of the patent unamended. He is of the opinion that the conveyor disclosed in DE-B-1 044 707 would be completely unsuitable for use in a restrainer in a slaughterhouse, and moreover could not give any indication to the man skilled in the art of slaughterhouse equipment as to how to solve the problem underlying the invention of the present patent.
- VI. In his observations, filed 11 September 1986, on this statement of the Appellant, the Respondent (Opponent) requests that the appeal be dismissed. He states that the man skilled in the art, i.e. slaughterhouse equipment, will be perfectly aware of conveying problems, and would be taught by the disclosure of DE-B-1 044 707 how to avoid any interference between the products to be conveyed and the conveyor and hence how to prevent any pinching effect and subsequent agitation of the animals arising in the apparatus thus to arrive at the invention of the present patent.

- VII. In response to a communication from the Board dated 2 July 1987 and setting out their provisional opinion that it would appear obvious for the man skilled in the art to apply the teaching of DE-B-1 044 707 to the restrainer of NL-A-7 705 519 to arrive at the subject-matter of Claim 1, the Appellant replied in a letter dated 19 October 1987 that the publications showing how to avoid the opening and closing of gaps were very old, e.g. DE-C-345 352 published in 1921, and that the restrainer art is also very old, e.g. US-A-2 185 949 from 1940, indicating the presence of an inventive step. Moreover, he alleged that flat plates had always been considered to be essential for supporting the animals in the restrainer.
- VIII. In the oral proceedings held at the request of the Appellant, he emphasised the age of the restrainer art, again pointing out that the use of flat plates has been traditional for at least 40 years, namely from at least US-A-2 185 949 of 1940 up to shortly before the priority date of the present invention. To demonstrate this, he showed the Board a Manual for Pig Slaughterhouses issued amongst others by the Minister of Agriculture and Fishery of Holland. In the light of references on pages 9 and 11 to proposals respectively passed in 1974 and anticipated to be completed in 1976, the Appellant estimated the date of publication of the Manual as 1975. It was pointed out to the Appellant that since this document was not introduced until the oral proceedings it must be considered as late-filed. Moreover, it was not in one of the official languages, (but in Dutch); it does not contain a publication date, but that in the light of a reference in a list of literature at the end of the manual to a publication of 1976, the Appellant's estimate of a publication date of 1975 could not apparently be correct. This traditional use of flat plates was not, however, contested by the Board or the Respondent. The Appellant

further argued that the presence of the gaps between the plates was essential to allow cleaning of the conveyors, the disadvantage associated therewith of trapping and pinching the transported animals having been accepted all these years. He also proposed amending the description in the patent, if considered necessary by the Board, to make clear the age of the slaughterhouse art and the tradition of using flat plates with gaps.

The Respondent contested those views and emphasised that the features of the characterising part of Claim 1 were all known from DE-B-1 044 707, and that the application of these features to the apparatus of NL-A-7 705 519 would be obvious for the man skilled in the art to arrive at the subject-matter of Claim 1.

Reasons for the Decision

1. The Appeal is admissible.
2. The invention relates to an apparatus for stunning animals to be slaughtered, such as pigs, as set out in the precharacterising part of Claim 1, and in NL-A-7 705 519.
3. In this known apparatus, the plates of the conveyor means are of rectangular cross-section so that when they pass around the reversing wheels, gaps open up between them. These gaps then close again when the plates leave the wheel region and can trap the hide, tail or legs of the animal, causing agitation and possible damage to the animals.
4. It is generally accepted that such agitation of the animals before slaughtering them has a deleterious effect on the meat produced from the animal.

5. The problem to be solved by the present invention is therefore to avoid any trapping of the animal between the conveyor plates.
6. This is achieved by means of the three features forming the characterising part of Claim 1, namely in that:
- said plates (15) are operable to hinge about each other at the edges by means of interengaging curved edge portions (16, 17), said edge portions being concentric with the associated hinge shaft (13) of the chain links (12)
 - said edge portions are shaped such that the cylindrical front edge (16) of each plate is covered over part of its front edge surface by the rear edge (17) of the preceding plate
 - said plates have a curved outer plane (18) between said edge portions which curvature is such that at the location of each reversing wheel said plate is concentric with the axis (19) of said reversing wheel.
7. However, the basic idea of a conveyor having elements with interengaging cylindrical curved edge portions and curved outer planes between the curved edge portions which element has a curvature being concentric with the axis of the reversing wheel, thus preventing any gap between the elements at any location of the conveyor is already disclosed in DE-B-1 044 707.

The conveyor according to DE-B-1-044 707 concerns a conveyor chain running over reversing wheels at its ends,

- said conveyor chain comprises a plurality of individual elements interengaging with each other and being connected to each other side by side,
- said elements are operable to hinge about each other at the edges by means of interengaging curved edge portions,
- said edge portions are shaped so that the cylindrical front and rear edges of each element are covered over part of their front respectively rear edge surface by the rear respectively front edge of the adjacent element,
- said elements further have a curved outer plane between said edge portions which element has a curvature such that at the location of each reversing wheel said element is concentric with the axis of said reversing wheel.

This known design of a conveyor chain is intended to avoid any gaps between the adjacent elements at the location of the hinges and the reversing wheels. The overlapping edge portions prevent any kind of fibrous or splintery material transported by the conveyor chain entering between adjacent elements (cf. DE-B-1 044 707, column 3, line 37 to column 4, line 2 and lines 7 and 8 as well as Claim 1, lines 18 to 22).

The Board agrees with the Opposition Division that, in the light of the disclosure of DE-B-1 044 707, it would be obvious to the man skilled in the art to apply the known teaching with corresponding effect to an apparatus according to NL-A-7 705 519 if he is confronted with the problem of preventing any obvious damage to the animals due to the gaps between adjacent plates.

8. The man skilled in the art of slaughterhouses would apparently be a mechanical engineer conversant with conveying problems, who if he was unaware of any conveyor in the slaughterhouse field suitable for solving his problem, could be expected to consult the general conveyor field for possible solutions. The specialist in the conveyor field is therefore the person qualified to assess the question of whether the solution involves an inventive step in the present case (see T 32/81 of 3 September 1984 (OJ 6/82, page 225)).
9. The subject-matter of Claim 1 is therefore lacking in inventive step.
10. The arguments of the Appellant against this finding are not sufficiently persuasive.
 - 10.1 The age of the documents, in particular of DE-B-1 044 707 (1958), are of no significance in the absence of any evidence of a long felt need. Indeed, it is accepted that no attempts had previously been made to solve this problem since the slaughterhouse manufacturers and operators were prepared simply to accept the disadvantages associated therewith.
 - 10.2 A long tradition exists of the use of flat plates with gaps therebetween. This also is not contested but on its own does not imply a prejudice for the man skilled in the art. A reluctance to change is often a commercial rather than a technical consideration. The Appellant has argued that the gaps were considered essential for cleaning of the inclined conveyor plates, and the flat plates essential for proper support of the animals. No evidence has been filed to demonstrate this.

- 10.3 A surprising effect is achieved by the use of the curved surface of the plates. This curved surface holds the body of the animal away from the joints between the plates, making it less likely that hairs on the animals body become trapped in the ever present small gaps. The Board is not fully convinced that this effect exists. The body of the animal is not rigid and when wedged down between the two conveyors it would seem most likely that the soft belly of the animal would be pushed out into the gaps. To prevent this happening the radius of the curved surface would apparently have to be so small as to form uncomfortable ridges on the surfaces of the conveyors, which again would merely serve to upset the animals.
- 10.4 The conveyor described in DE-B-1 044 707, cannot be used in a restrainer, was not meant for use in a restrainer, and cannot transfer any information to the man skilled in the art to solve the problem underlying the invention. Moreover, a conveyor inclined to the horizontal clearly requires special support not described in the DE-B-1 044 707. Further, since the known conveyor is made up of side-by-side elements, these elements would separate under load when inclined sideways and so would provide even more gaps to trap the animals. These objections ignore however the fact that the man skilled in the art is looking only for a solution to the problem of how to avoid gaps forming between adjacent in-line plates in the apparatus of NL-A-7 705 519. The solution to this problem is provided by the known conveyor.
- 10.5 Imitation by others occurred after they saw the success of the invention. Commercial success, for example demonstrated as here by copying by competitors, can only be taken into account if it can be demonstrated that the success was due essentially to the invention rather than, for example, to advertising etc. No attempt was made to demonstrate this.

Order

For these reasons, it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

S. Fabiani

P.E.M. Delbecque