BESCHWERDEKAMMERN BOARDS OF APPEAL OF CHAMBRES DE RECOURS PATENTAMTS

OFFICE

DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:

- (A) [] Publication in OJ
- (B) [] To Chairmen and Members
- (C) [X] To Chairmen
- (D) [] No distribution

Datasheet for the decision of 24 May 2007

T 0086/06 - 3.2.01 Case Number:

Application Number: 00953127.8

Publication Number: 1202926

B66F 9/065 IPC:

Language of the proceedings: EN

Title of invention:

Vehicle for handling sheet metal coils

Patentee:

Ferrari Belotti SpA

Opponent:

Fantuzzi Reggiane S.p.A.

Headword:

Relevant legal provisions:

EPC Art. 56, 83

Keyword:

- "Sufficiency of disclosure (yes)"
- "Novelty, inventive step (yes)"
- "Introduction of new document (yes)"
- "Remittal (yes)"

Decisions cited:

T 0190/99

Catchword:



Europäisches Patentamt European Patent Office

Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0086/06 - 3.2.01

DECISION
of the Technical Board of Appeal 3.2.01
of 24 May 2007

Appellant: Fantuzzi Reggiane S.p.A.

(Opponent) Via Agosti, 27

IT-42100 Reggio Emilia RE (IT)

Representative: Modiano, Micaela Nadia

Modiano Josif Pisanty & Staub Ltd

Thierschstrasse 11 D-80538 München (DE)

Respondent: Ferrari Belotti SpA (Patent Proprietor) Via A. Gramsci 2

IT-16010 Genova-Manesseno (IT)

Representative: Karaghiosoff, Giorgio Alessandro

Studio Karaghiosoff e Frizzi s.r.l.

Via Pecorile 25/C

IT-17015 Celle Ligure (SV) (IT)

Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted 11 November 2005 rejecting the opposition filed against European patent No. 1202926 pursuant to Article 102(2)

EPC.

Composition of the Board:

Chairman: S. Crane

Members: P. L. P. Weber

S. Hoffmann

Summary of Facts and Submissions

I. The appeal is against the decision of the Opposition Division posted on 11 November 2005 to reject the opposition.

The appellant filed the notice of appeal on the 11 January 2006 and paid the appeal fee on the same day. The statement of the grounds of appeal was filed 21 March 2006.

II. Claim 1 of the granted patent reads as follows:

A vehicle for handling coils, particularly sheet metal coils or the like, comprising:

- a) a wheeled bridgelike frame structure (1) which forms a tunnel (3), extending all along the vehicle, and so dimensioned as to allow the passage of the vehicle above a coil (2) laying on the ground and oriented with his axis parallel o the ground and perpendicular to the longitudinal axis of the vehicle
- b) the bridgelike frame structure (1) consists of a pair of framework longitudinal members (101), the distance between them corresponding to, or being slightly greater than the axial dimension of a coil (2), and of a transverse structure (201) which connects the two longitudinal members (101), and is disposed at a height greater the diameter of a coil (2)
- c) an upper aperture (103) in the tunnel between the longitudinal members (101), this aperture being dimensioned so as to allow a coil (2) to be passed through it and to be lifted above the height of the tunnel

- 2 - T 0086/06

d) means (18) mounted inn the bridgelike framestructure for gripping and lifting the coils (2)e) an operating cab (7) and a motor (20) mounted on thebridgelike frame structure

f) the transverse structure (201) is limited to the rear half of the bridgelike frame structure (1) g) the upper aperture (103) of the tunnel is open at the front end of the bridgelike frame structure (1) h) the means for lifting the coils (2) consist of a crane type lifting boom (10) which is articulated to the rear end of the vehicle at the rear of the transverse structure (201).

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

D5: US-A-3407947

characterized in that

D7: DE-C-4126573

D22: GB-A-1601484, filed by the appellant with the statement of the grounds of appeal.

IV. Oral proceedings took place on the 24 May 2007.

The appellant requested the setting aside of the decision and the revocation of the patent.

The respondent requested the dismissal of the appeal.

The respondent declared that it wished the case to be remitted to the first instance in case document D22 is admitted into the proceedings and the appellant agreed.

- 3 - T 0086/06

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

The invention is not disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

In the present case claim 1 defines an item, the vehicle, in relation to another item, the coil, but the coil is neither clearly defined in the claim nor in the description so that the man skilled in the art does not know how to build the vehicle. Numerous coils are on the market having different diameters and width and even different shapes. Should the vehicle be for a coil of a diameter of 15cm or for a diameter of 3m?

The drawings of the patent not only cannot help since they are approximate but there are even discrepancies in them as for example in figure 4 where the diameters of the two coils shown are different. The size of individual persons not being standard, this reference cannot be taken from the drawings either.

In addition the terms "tunnel" and "slightly greater" in claim 1 are also not precise enough for the skilled man to be able to build an embodiment according to the claim, since it is not clear what dimensions are meant by these terms.

Due to the unclarities in the wording of claim 1 the vehicle of D5 fully anticipates the subject-matter of the claim. In particular, a tunnel is present in the vehicle according to D5, the space between the prongs

- 4 - T 0086/06

5,6 and the ground or the part joining the prongs and the ground being high enough for a small coil to pass underneath.

The fork 35 of D5 must also be considered to be a gripping means in the sense of claim 1 since it is possible to transport a coil with it. In any case since some of the other applications mentioned in D5 in column 1, lines 36 to 40 or column 5, lines 7 to 13 would necessitate other gripping means those must also be considered disclosed by D5.

The fork of the vehicle according to D5 can also be positioned between the two prongs 5 and 6 for instance when the telescopic boom only comprises two elements.

In any case the subject-matter according to claim 1 is not inventive over D5 combined with D7. Should the skilled man want to lift coils with the device according to D5, he would simply replace the fork 35 of D5 by a gripping means according to D7. It would equally well be an obvious step for the skilled man to use four wheels or bigger wheels, if he wished to have a bigger tunnel underneath the frame.

D22 filed with the statement of the grounds of appeal is another document anticipating the subject-matter of claim 1.

This document discloses a vehicle (suitable) for handling coils, particularly sheet metal coils, or the like (see the figures in conjunction with the description page 1, lines 10-15 and 38-39), comprising:

- 5 - T 0086/06

- a) a wheeled bridgelike frame structure (1, 2) which forms a tunnel (see space between wheels 4, 5 and base 3 in figures 3-4 and description page 2, lines 72-76) extending all along the vehicle and so dimensioned as to allow the passage of the vehicle above a coil lying on the ground and oriented with its axis parallel to the ground and perpendicular to the longitudinal axis of the vehicle,
- b) the bridgelike frame structure (1) consists of a pair of framework longitudinal members (2), the distance between the corresponding to or being slightly greater than the axial dimension of the coil, and of a transverse structure (3) which connects the two longitudinal members (2) and is disposed at a height greater than the diameter of a coil,
- c) an upper aperture (see the free front aperture between the arms 2 and base 3 as shown in figures 1-2) in the tunnel between the longitudinal members (2), this aperture being dimensioned so as to allow a coil to be passed through it and to be lifted above the height of the tunnel,
- d) means (16) mounted on the bridgelike frame structure(I) for gripping and lifting the coils,
- e) an operating cab (9) and a motor (8) mounted on the bridgelike frame structure (1),
- f) the transverse structure (3) is limited to the rear half of the bridgelike frame structure (see the figures 1-2 and 5 and description page 2, lines 18-26),

- 6 - T 0086/06

- g) the upper aperture of the tunnel is open at the front end of the bridgelike frame structure (see open space between the base 3 and arms 2, U-shaped),
- h) the means for lifting the coils consist of a cranetype lifting boom (16) which is articulated to the rear end of the vehicle at the rear of the transverse structure (3 and articulation 15 to pillars 14).
- VI. The arguments of the respondent (patentee) can be summarised as follows:

The requirement of sufficiency of disclosure does not mean that an exactly dimensioned embodiment has to be disclosed. It means that the skilled man must be able to carry out the invention without undue burden. The present disclosure is sufficient for a skilled man with a university degree in mechanical engineering and an ability to make some calculations to build a vehicle according to claim 1. Sheet metal coils have different dimensions depending on the factory producing the coils so that the vehicle has to be adapted in its size accordingly. This would pose no problem whatsoever to the skilled man. In addition in the patent in suit exemplary dimensions can be found on figure 5, for instance.

The vehicle according to D5 has no gripping means in the sense of the patent in suit, since according to the normal definition of "to grip" as for example shown in the numerous extracts of dictionaries filed, this word means "to grasp firmly" which quite clearly cannot be done by a fork.

- 7 - T 0086/06

Concerning the tunnel, it is clear from the description of the patent that the function of the tunnel is to allow the vehicle to drive over a row of coils. This is not possible with the vehicle according to D5.

Even if it might be possible to fix other transporting or gripping means to the boom of the vehicle according to D5 instead of the fork, no such other means are disclosed.

The problem the present invention is trying to solve is mentioned in paragraph [0003] of the description. If the skilled man wanted to try and solve this problem starting from the vehicle according to D5 it would have to completely change its construction. Reference to the gripping means disclosed in D7 cannot change anything because the vehicle according to D5 still would not have a suitable tunnel.

The reasoning presented by the appellant is a typical ex-post facto one, the appellant trying to artificially read the documents onto the claims without there existing a technical basis for it.

Concerning D22 the respondent is content to have this document examined by an opposition division in order to have two instances if the board considers that it should be introduced into the proceedings.

Reasons for the Decision

1. The appeal complies with the requirements of Articles 106 to 108 and Rule 64 EPC. It is therefore admissible.

2. Article 100(b) EPC

The objections of the appellant to insufficiency of disclosure under Article 100(b) EPC can be much more readily understood as objections to lack of clarity, which is however not a ground of opposition under the EPC, the complaint being in essence that the dimensions of various features of the vehicle claimed are defined by reference to an article (the coil to be handled) which is not part of the claimed subject-matter. When couched in terms of an insufficiency objection the argument is in effect that the skilled man setting out to build a vehicle as claimed would not know how large to make it.

The board cannot agree with this argument and is of the opinion that the general knowledge of the person skilled in the art of vehicle technology will enable him to build a vehicle for a given coil dimension. He can also find the general dimensions of an embodiment in figures 5a and 5b of the patent. The other figures give him an indirect indication of the dimensions as well since they show the driver in the cab or alongside the vehicle and in figure 6 a lorry is shown together with an embodiment of the claimed vehicle.

In this context the board cannot accept the assertion of the appellant that the skilled person would start to

- 9 - T 0086/06

build the vehicle from scratch with no intention that it be used to handle a specific limited range of coil sizes and weights. In commercial terms this is a wholly unrealistic proposition. A vehicle of the size to which the invention relates would not be built speculatively in the hope that a customer might be found for it but instead would be designed from the start in close liaison with the end user, for example a steel rolling mill, which would give detailed instructions on the nature of the coils to be handled.

The appellant additionally objected that the terms "slightly greater" and "tunnel" are undefined so that the man skilled in the art would not know how to build a vehicle with these elements.

In feature b) the distance between the two framework longitudinal members is said to correspond to or to be slightly greater than the axial dimension of a coil.

This has to be understood taking account of the technical context of the invention. From features c) and d) of the claim it is clear that gripping means and lifting means are present which should be able to grip a coil lying between the longitudinal members and to lift it. According to the board, this means that the term "slightly greater" must include enough space for the gripping means to be able to grip the desired coil. Additionally it is self-evident that some space must be provided for the vehicle to be able to manoeuvre to some extend along a row of coils. The dimensions visible in the figures give additional indication as to what the drafter of the patent in suit considered to be "slightly greater".

- 10 - T 0086/06

Feature a) requires the presence of a tunnel extending all along the vehicle and so dimensioned as to allow the passage of the vehicle above a coil lying on the ground and oriented with its axis parallel to the ground and perpendicular to the longitudinal axis of the vehicle.

In the opinion of the board the definition of the tunnel given in feature a) is clear. Once it is known what kind of coils have to be lifted feature a) gives the man skilled in the art precise indications as to the desired shape and dimensions of the tunnel. It is also clear from the description and from the aim of the invention that the vehicle has to be able to drive over a row of aligned coils, the coils being underneath the frame structure and thus in the claimed tunnel.

These are obvious considerations easily deductible from the patent as a whole so that the use of the two terms mentioned above will not hinder the man skilled in the art from building a vehicle according to the claim.

The invention is therefore disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

3. Novelty over D5

According to the appellant all the features of claim 1 are disclosed by D5. The appellant argues in particular that underneath the frame structure there is a tunnel along the whole length of the vehicle through which a small coil can pass. Such a small coil can also be

- 11 - T 0086/06

lifted by the fork 35 which must be considered to be a gripping means.

3.1 Interpretation of claim 1

The board shares the view expressed in T 190/99 that the man skilled in the art when considering a claim should rule out interpretations which are illogical or which do not make technical sense. He should try much more to arrive at an interpretation of the claim which is technically sensible and takes into account the whole disclosure of the patent.

In the present case this means that when the claim claims a vehicle for handling coils, in particular sheet metal coils or the like, this must be understood taking account of the patent as a whole. The whole patent is about being able to reduce the storage area for sheet metal coils. The coils referred to in the description are thus relatively big and heavy sheet metal coils as also visible in the figures, and the comparable products meant as mentioned in paragraph [0044] are of comparable size. It would thus not be a sensible interpretation to consider that the coils meant in the claim could be as small as a few centimetres in diameter. It would be quite unrealistic to conclude from the description of the patent that it was an aim of the inventors to conceive a vehicle able to be driven over a coil of such small dimensions as for instance a roll of kitchen aluminium foil, and meant to pick up such small coils.

3.2 When establishing what a prior art document discloses, the same principles apply.

- 12 - T 0086/06

The skilled person when considering a prior art document would equally rule out interpretations which are illogical or which do not make technical sense, and would arrive at an interpretation which is technically sensible and which takes into account the whole disclosure of the prior art document.

3.3 In the present case the board considers that several features of claim 1 are not disclosed in D5.

D5 describes a three-wheeled material moving device mainly comprising a U-shaped frame on which a telescopic boom is mounted bearing a transporting fork.

Of course an extremely small coil is able to pass underneath the frame structure of the vehicle disclosed in D5. The board however is of the opinion that the skilled man would never consider the vehicle disclosed in D5 to be suitable for handling such small coils individually as required by claim 1 of the granted patent.

As far as coils of the size required by the patent are concerned, feature a) of claim 1 implies that the vehicle must be able to be driven over such coils lying on the ground. Of course the frame structure of the vehicle according to D5 must be away from the ground a distance big enough to allow the vehicle be moved. However the space needed for the vehicle to be able to move in normal working conditions is far from being of the size of a sheet metal coil. In any case the single rear wheel lies on the central longitudinal axis of the vehicle and thus lies in the middle of the space which

- 13 - T 0086/06

the appellant seeks to define as a "tunnel". Consequently a tunnel extending all along the vehicle as required by feature a) is not present on the vehicle according to D5.

Feature b) is not present either since the transverse structure is not high enough. No tunnel being present features c), g) are also not present.

Further, the vehicle according to D5 does not comprise gripping means. The fork 35 cannot be considered to be a gripping means in the sense of the present claim. As explained by the respondent the action of gripping requires an action of grasping. Such a grasping cannot be performed by a fork.

Additionally, according to the understanding of the board the attacked claim requires that the gripping means and the lifting means be so arranged as to allow the gripping and the lifting of a coil placed between the longitudinal members (features c) and d)). Such an operation is not possible with the vehicle according to D5 since when looking at figure 2 which represents the vehicle with its boom being completely retracted, it is not possible to place the fork on the ground between the longitudinal elements, which would at least be necessary to be able to pick up a coil lying between the longitudinal members.

Thus the subject-matter of claim 1 is clearly novel with respect to D5.

- 14 - T 0086/06

4. The appellant further alleged that it would be obvious to arrive at the subject-matter of claim 1 by combining the gripping means of D7 with the vehicle of D5.

D7 discloses a cage construction for handling heavy cylindrical objects such as sheet metal coils. The gripping and transporting means used in this device normally grip the cage in which the heavy object is located. They however further comprise grippers having a convex surface for gripping the coil and putting it into or taking it out of the transporting cage.

Even if the skilled man took over the gripping means of D7 and used it instead of the fork in the material moving device according to D5, he would still not come to the vehicle according to claim 1, since as already mentioned above there are so many features absent from D5 that many of them, as for instance the tunnel, would still be missing.

Having regard to the documents D5 and D7 the subjectmatter of claim 1 thus is not obvious for a person skilled in the art.

5. Introduction of D22 into the proceedings

Considering the broad meaning given to the term "coil" in paragraph [0044] of the patent in suit and that in D22 it is mentioned that "other heavy articles" could be lifted by the lifting means (page 1, line 39) or that the skilled man would recognise "widely differing applications" (page 2, lines 84-89), considering further that the tunnel present on the vehicle according to D22 seems to be of a comparable size to

- 15 - T 0086/06

the one disclosed on the drawings of the patent in suit (page 2, lines 72-76 "...so that the device may pass over a truck tray or trailer."), that the general shape of the vehicle shown in D22 is the same as the one claimed (no other document on file showing a comparable vehicle shape) and that the vehicle is provided with a crane-type lifting boom articulated on the rear end of the vehicle it seems that D22 is prima facie highly relevant at least for the evaluation of the inventive step of the subject-matter of granted claim 1.

The board thus decides to introduce the document into the proceedings for further consideration of patentability with respect to this state of the art.

6. In this case the respondent requested the board to remit the case to the opposition division. The board allows this request since it finds it appropriate to give the respondent the possibility of defending its case in front of two instances. The appellant also agreed that this way of proceeding was the most appropriate.

- 16 - T 0086/06

Order

	For	these	reasons	it	is	decided	that:
--	-----	-------	---------	----	----	---------	-------

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution.

The Registrar:

The Chairman:

A. Vottner

S. Crane