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# Datasheet for the decision of 8 July 2016

Case Number: T 0423/15 - 3.2.07

Application Number: 06828008.0

Publication Number: 1996488

IPC: B65D88/16

Language of the proceedings: EN

#### Title of invention:

CONTAINER ASSEMBLY

#### Patent Proprietor:

Flextank International Ltd

## Opponent:

Wine & Tools

#### Headword:

## Relevant legal provisions:

EPC Art. 100(b), 83

## Keyword:

Sufficiency of disclosure - (yes)

Dec			

Catchword:



# Beschwerdekammern **Boards of Appeal** Chambres de recours

European Patent Office D-80298 MUNICH **GERMANY** Tel. +49 (0) 89 2399-0 Fax +49 (0) 89 2399-4465

Case Number: T 0423/15 - 3.2.07

DECISION of Technical Board of Appeal 3.2.07 of 8 July 2016

Flextank International Ltd Appellant:

Unit 1 (Patent Proprietor)

26 Grosvenor Street

Abbotsford, VIC 3067 (AU)

Representative: Cabinet Plasseraud

66, rue de la Chaussée d'Antin

75440 Paris Cedex 09 (FR)

Respondent: Wine & Tools 8 Rue de Bruges (Opponent)

33000 Bordeaux (FR)

Intès, Didier Gérard André Representative:

> Cabinet Beau de Loménie 158, rue de l'Université 75340 Paris Cedex 07 (FR)

Decision under appeal: Decision of the Opposition Division of the

> European Patent Office posted on 15 January 2015 revoking European patent No. 1996488 pursuant to

Article 101(3)(b) EPC.

## Composition of the Board:

Chairman K. Poalas Members: G. Patton

R. Cramer

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## Summary of Facts and Submissions

I. The appellant (patent proprietor) lodged an appeal against the decision of the opposition division to revoke European patent No. 1 996 488.

The opposition had been filed against the patent as a whole and was based on Article 100(a) EPC (lack of inventive step) and Article 100(b) EPC (insufficiency of disclosure).

The opposition division considered that the skilled person would not be able to perform the invention as defined in claim 1 of one of the main request (patent as granted) and the then first to fifth auxiliary requests (Articles 100(b) and 83 EPC).

II. Oral proceedings before the board took place on
8 July 2016.

The appellant requested that the decision under appeal be set aside and that the patent be maintained as granted (main request) or alternatively maintained in amended form on the basis of the claims of one of the first to fifth auxiliary requests filed with the statement of grounds of appeal. It further requested remittal to the department of first instance in the event that the board acknowledged sufficiency of disclosure for one of these requests.

The respondent (opponent) requested that the appeal be dismissed.

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III. Claim 1 of the main request (patent as granted) reads as follows:

"A container assembly moveable by forklift and suitable for the maturation of wine comprising,

a rigid container (21) having a body the walls of which are moulded from oxygen permeable polyethelene,

a neck (23) with an open mouth extending from an upper wall of the container body and ,

an outlet (42) for draining wine from the container arranged near a bottom wall of the container. characterised in that,

a frame (22) is provided for supporting the container (21) and bracing walls of the container against bulging,

the frame comprising a stacking structure which facilitates stacking of container assemblies one atop the other.

the container (21) is generally flat sided, the walls of the container having a volume to surface area to thickness ratio chosen to control oxygen permeation into the wine at a rate suitable for maturation of the wine,

the container (21) has an upper wall shaped to allow substantially all air to flow out of the container through the neck (23) when the container is filled to the level of the bottom of the neck, the container being shaped to allow substantially all liquid in the container to drain through the outlet (42) when it is opened,

whereby, the container has a bottom wall which slopes downwardly towards the outlet (42), and whereby, the frame has an access opening (48) below the container for allowing entry of the tynes of a forklift."

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Claim 2 of the main request reads as follows:

"A container assembly according to claim 1 characterised in that the neck (23) and open mouth form a manhole"

Claim 3 of the main request reads as follows:

"A container assembly according to claim 1 or claim 2 characterised in that the polyetheylene material forming the container (21) has a permeability which can be measured at a rate of 13 milligram to 65 milligram of atmospheric oxygen per square metre of surface area as measured for a 1 mm thickness during a 24 hour period at room temperature."

IV. The appellant argued essentially as follows:

Main request - claim 1

The skilled person would realise that the disclosure under paragraphs [0031] and [0041] of the contested patent, relating to the selection of the container parameters - volume, surface and thickness - and the corresponding disclosure in D1 (WO 2005/052114 A), said document being referred to in the contested patent, were incorrect since they would lead to non-reasonable wall thicknesses for a polyethylene container. He would then ignore them and rely on other passages of the contested patent and/or his common general technical knowledge.

Using his common general technical knowledge about the usual rates for wine maturation, such as those disclosed in D1 for oak barriques, and having assessed the geometry of the polyethylene container (volume to

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surface ratio) the skilled person would arrive at reasonable wall thicknesses, using the preferred oxygen permeability rate of polyethylene defined in the contested patent.

Therefore the skilled person would be able to perform the invention as recited in claim 1, in particular for containers of capacities usual in the wine maturation field. Such containers have to allow entry of the tynes of a forklift underneath the container and are depicted in the figures of the contested patent.

#### Main request - claim 2

The objection raised against the term "manhole" used in claim 2 could eventually be related to lack of clarity and so would not be considered in opposition-appeal proceedings. In any case, as far as concerns the size envisaged by the term "manhole", the skilled person guided by his general technical knowledge would be able to build such container assemblies and, hence, to perform the invention as recited in claim 2.

# Main request - claim 3

There are several types of polyethylene which have an oxygen permeability lying within the claimed permeability range. In order to perform the invention as recited in claim 3, the skilled person would only need to select the appropriate ones.

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## V. The respondent argued essentially as follows:

Main request - claim 1

The skilled person would not be able to perform the invention as recited in claim 1 in view of the feature: "the walls of the container having a volume to surface area to thickness ratio chosen to control oxygen permeation into the wine at a rate suitable for maturation of the wine".

The claimed result to be achieved - "suitable for maturation of wine" - is undefined and, in addition, the skilled person would find no indication in the contested patent taken as a whole as to how to select the claimed parameters of the container - volume, surface and thickness - because of their complex interaction. The teaching of paragraphs [0031] and [0041] of the contested patent relating to the selection of these parameters is erroneous, as admitted by the appellant. Since its correction is unclear, the skilled person would not be able to properly dimension the container wall thickness of the claimed container assembly, i.e. would not be able to perform the invention as recited in claim 1.

Document D1 cited in the contested patent comprises the same erroneous and misleading teaching concerning the volume/surface/thickness ratio, and it does not provide any hint on how to correct this either. Hence the skilled person would be convinced that the invention is to be performed as originally disclosed and would have no reason to disregard said erroneous and misleading teaching. The disclosure of D1 with respect to the oxygen permeation of oak barriques cannot be transferred to other types of barrique, since oak

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barriques have their own specific behaviour and drawbacks.

Furthermore, the skilled person combining the capacities of containers given in D1 with the teaching of paragraphs [0031] and [0041] of the contested patent would arrive at a wall thickness of 0.3 mm for a cubic polyethylene container. Such a wall would not be so thin that the skilled person would recognise that said teaching of the contested patent was erroneous and misleading. He would then implement the invention with such a wall thickness of 0.3 mm, which would however be too thin and not suitable for maturation of wine, i.e. he would not be able to perform the invention as recited in claim 1.

A further hurdle for the skilled person in performing the invention would be that the contested patent as a whole is silent about the maximum wine content of the polyethylene container.

Main request - claim 2

No definition is given in the contested patent for the term "manhole" used in claim 2, and therefore the skilled person would not be able to perform the invention as recited in claim 2.

Main request - claim 3

Many of the known polyethylene types have an oxygen permeability falling outside the range specified in claim 3. Since no information is provided in the contested patent on how to achieve such permeability, the skilled person would not be able to perform the invention as recited in claim 3.

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#### Reasons for the Decision

- 1. Main request (patent as granted)
- 1.1 Claim 1
- 1.1.1 According to the impugned decision, see point II.2.2.5, and as also argued by the respondent, the skilled person would not be able to perform the claimed invention since he would not have enough technical information at his disposal for selecting the claimed factors of claim 1:

"the walls of the container having a **volume** to **surface** area to **thickness ratio**"

and achieving the claimed result to be achieved:

"to control oxygen permeation into the wine at a rate
suitable for maturation of the wine".

The teaching of paragraphs [0031] and [0041] of the contested patent is **misleading** and results in non-reasonable thicknesses for the container walls. As it would not be clear how to correct this misleading teaching, the skilled person would not be able to properly dimension the container wall thickness of the claimed container assembly.

- 1.1.2 As correctly put forward by the respondent, the invention defined in claim 1 does not comprise any specific wine maturation level to be achieved. Nor does it set a specific limit for the oxygen permeation rate suitable for maturation.
- 1.1.3 This in itself cannot, however, justify saying that the skilled person will not be able to perform the invention.

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- 1.1.4 In fact, it is up to the skilled person to decide to what extent wine maturation is to be achieved, ranging from a very low degree of maturation, producing a wine bordering on a soft drink, to a very high degree of maturation, producing a wine bordering on vinegar. The claimed result to be achieved encompasses any suitable degree of maturation targeted by the skilled person.
- 1.1.5 Further, maturation of wine belongs to the skilled person's common general knowledge in the sense that the skilled person knows the amount of oxygen per year needed for the maturation of a litre of a given type of wine.
- 1.1.6 For instance, a typical oxygen mass to be transferred into a litre of wine per year via permeation is explicitly disclosed on page 3 of D1, lines 17-25. An upper limit for such an oxygen mass is disclosed on page 9 of D1, lines 7-12. Contrary to the respondent's view, the typical oxygen mass values given in D1 for oak barriques represent the common general technical knowledge concerning the amount of oxygen required for the maturation of a litre of a given type of wine within a given period of time, and the skilled person would also apply said oxygen mass values to wine containers made from materials other than oak.
- 1.1.7 The board further shares the appellant's view that the skilled person would realise that the disclosure of paragraphs [0031] and [0041] of the contested patent is incorrect as it leads to non-reasonable container wall thicknesses, ranging according to the appellant's calculations from 0.025 to 0.15 mm for a cubic polyethylene container of 1 m³. The skilled person would also for the very same reason calculate a similar "technically meaningless" wall thickness range on the

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basis of the disclosure of D1, see page 7, lines 31-33, and claim 4. As he will not know how to correct this error, he will certainly not take this disclosure into account when performing the invention according to claim 1. Hence he will have to rely on other passages of the contested patent and/or his common general knowledge.

- 1.1.8 The board shares the respondent's view that ascertaining the relationship between the container's geometrical characteristics defined in claim 1, namely the volume to surface area to thickness ratio, in order to achieve an oxygen permeation suitable for maturation of the disclosed wine is a complex process. However, the way the skilled person is to handle this complexity is convincingly explained by the appellant in its statement setting out the grounds of appeal under point B.3.b, see in particular pages 16-17.
- 1.1.9 Indeed, once the skilled person arrived at the desired volume/surface ratio (fourth step in the statement of grounds), which amounts to a mere selection of the geometry and size of the container, using his common general technical knowledge he would know the mass of oxygen per year needed to be introduced in order to allow maturation of the given volume of wine, as discussed under points 1.1.2 to 1.1.6 above. As a result, and in view of the given surface of the container, he would then be able to determine the wall thickness needed by taking the intrinsic oxygen permeation of polyethylene into account.
- 1.1.10 The board follows the respondent's argument that the permeability of polyethylene can be influenced by many factors, as for example its density (low or high) and/ or its crystallinity. However, the preferred range to

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be applied when performing the invention is specified in paragraph [0007] and in claim 3 of the contested patent and is unambiguously obtainable by the person skilled in the art, see also point 1.3 below.

- 1.1.11 Finally, as already discussed under points 1.1.2 to 1.1.6 above, no specific maturation level to be achieved is required in claim 1. It merely has to be ensured that a suitable oxygen permeation rate is reached for maturation. In view of the above, this "threshold" would easily be determined for a given specific volume to surface area ratio after a reasonable amount of trial and error to be carried out by the person skilled in the art for a given type of wine.
- 1.1.12 In a further line of argument the respondent argues that the skilled person calculating the wall thickness of a 225 litre container mentioned on page 5 of D1 on the basis of the permeability range claimed in claim 3, in combination with the teaching of paragraphs [0031] and [0041] of the contested patent, would arrive at an upper limit of 0.3 mm for the wall thickness of a cubic polyethylene container. The skilled person would not consider 0.3 mm as being a technically meaningless wall thickness, especially as the frame of the claimed assembly is designed to counter the bulging of the container when filled with wine. In this respect, the expression "rigid container" used in claim 1 should not be interpreted as meaning that no bulging occurs, since bulging is envisaged in paragraph [0023] of the contested patent. Consequently, the skilled person would not disregard a polyethylene container with a wall thicknesses of 0.3 mm. However, such a thin wall would let too much oxygen enter the container, so that the wine would become vinegar, i.e. it would be spoiled

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and the container assembly would not be suitable for the maturation of wine as claimed. A further hurdle, according to the respondent, for the skilled person in performing the invention would be that no indication of a maximum capacity for the claimed polyethylene container is given in the contested patent. In view of the above, the skilled person would not be able to perform the claimed invention.

- 1.1.13 The board notes that even if the respondent's abovementioned line of argument were to be endorsed, the board still would come to the conclusion that the skilled person would be able to perform the invention. In fact, following the respondent's view, the skilled person would arrive at a stackable and liftable assembly comprising a polyethylene container in a counter-bulging frame, said assembly being able to contain wine without collapsing, even at a low wall thickness of 0.3 mm for the polyethylene container.
- 1.1.14 Since no time for maturation is specified in claim 1, the skilled person using his common general technical knowledge would calculate the wine maturation time in the polyethylene container depending on the wall thickness, i.e. the thicker the wall, the longer the time for a given maturation to be achieved and vice versa. In case of a 0.3 mm wall thickness for a polyethylene container of a given geometry (volume/ surface area ratio), the skilled person will unambiguously know how long the wine has to be kept inside the container for suitable maturation to be achieved. In addition, as already discussed under points 1.1.2 to 1.1.6 above, no specific maturation level to be achieved is required in claim 1, which hence covers the whole spectrum between a very low and a very high degree of maturation.

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- 1.1.15 As a result, even if the board were to follow the respondent's above-mentioned line of argument that the skilled person would not disregard the teaching in paragraphs [0031] and [0041] of the contested patent and would achieve the invention accordingly for a 225 litre container, the board still does not arrive at the conclusion that the skilled person would not be able to perform the invention.
- 1.1.16 Finally, there is no need to specify a maximum capacity of the polyethylene container in claim 1 for the skilled person to be able to perform the invention. This argument can be considered as a lack of clarity objection against claim 1, i.e. the claim being broad, rather than as an objection of insufficient disclosure, i.e. arguing that the skilled person would not be able to perform the invention. In any case, the board shares the appellant's view that the skilled person would perform the invention taking into consideration the usual capacities of containers, i.e. container assemblies in the wine maturation field. Such container assemblies comprise a frame having an access opening below the container for allowing entry of the tynes of a forklift, see claim 1, and are depicted for example in figure 2 of the contested patent.

## 1.2 Claim 2

1.2.1 According to the respondent, the term "manhole" used in claim 2 of the main request has no specific meaning and the contested patent as a whole does not provide any. Hence, it would be impossible to determine if such a manhole would have to be large enough for a man to enter the container, large enough for a man's arm to reach into the container, or large enough to provide viewing access into the container. Consequently, the

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skilled person would not be able to perform the invention as recited in claim 2.

1.2.2 The board cannot share this view. As argued by the appellant, the objection relates to clarity, i.e. "manhole" encompassing a broad meaning, rather than to insufficient disclosure for the skilled person to be able to perform the invention. Since clarity is not a ground for opposition, the objection need not be considered. In any case, the board is persuaded that whatever the size of the manhole according to the above-mentioned options for such a hole presented by the respondent, the skilled person would unambiguously be able to build the corresponding container assemblies.

#### 1.3 Claim 3

- 1.3.1 The respondent considers that the permeability range given in claim 3 would not be compatible with all types of polyethylene. Many types of polyethylene have a permeability lower than the claimed range.

  Since the contested patent does not provide information on to how to achieve such permeability, the invention as defined in claim 3 is not sufficiently disclosed for the skilled person to perform it.
- 1.3.2 The board cannot share this view. It is uncontested that there are several types of polyethylene exhibiting oxygen permeability lying within the range claimed in claim 3. As a consequence, in order to perform the invention, the skilled person merely needs to select the appropriate ones falling within the oxygen permeability range claimed in claim 3.

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1.4 In view of the above, the ground for opposition under Article 100(b) EPC does not prejudice the maintenance of the patent in accordance with the main request.

2. Auxiliary requests

As a result of the above there is no need to discuss the auxiliary requests in the present decision.

#### Order

## For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the opposition division for further prosecution.

The Registrar:

The Chairman:



B. Atienza Vivancos

K. Poalas

Decision electronically authenticated