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Datasheet for the decision of 20 September 2022

Case Number: T 0252/17 - 3.3.02

Application Number: 04797080.1

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Language of the proceedings: EN

Title of invention:
CONTROL OF OXYGENATION

Patent Proprietor:
Direct Barrels Pty Ltd

Opponent:
Wine & Tools

Relevant legal provisions:
EPC Art. 56, 84

Keyword:
Inventive step
Claims - clarity, conciseness

Decisions cited:
T 0423/15, T 0605/91

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Case Number: T 0252/17 - 3.3.02

D E C I S I O N
of Technical Board of Appeal 3.3.02
of 20 September 2022

Appellant: (Patent Proprietor)	Direct Barrels Pty Ltd 26 Grosvenor Street Abbotsford VIC 3067 (AU)
Representative:	Plasseraud IP 66, rue de la Chaussée d'Antin 75440 Paris Cedex 09 (FR)
Respondent: (Opponent)	Wine & Tools 8 Rue de Bruges 33000 Bordeaux (FR)
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 1 December 2016 revoking European patent No. 1689845 pursuant to Article 101(2) and 101(3)(b) EPC.**

Composition of the Board:

Chairman	M. O. Müller
Members:	A. Lenzen
	L. Bühler

Summary of Facts and Submissions

I. This decision concerns the appeal filed by the patent proprietor (appellant) against the opposition division's decision (decision under appeal) to revoke European patent No. 1 689 845 (patent).

II. The following documents, submitted before the opposition division, are referred to in this decision:

D1 AU 7158974 A
Annex 3 Calculation on D1 examples (2 pages)

III. In its decision, the opposition division found, *inter alia*, that claim 1 as granted did not involve an inventive step over D1 as the closest prior art in combination with the common general knowledge of the skilled person.

IV. With the reply to the statement of grounds of appeal, the opponent (respondent) filed the following document, *inter alia*:

E16 Print-out (Wayback Machine) of the Internet page http://www.stavin.com/stavefan.htm, captured on 2 October 2003

V. With the letter dated 22 May 2018, the appellant filed, *inter alia*, the sets of claims in the first to tenth auxiliary requests.

VI. With the letter dated 28 February 2022, the respondent filed, the following documents, *inter alia*:

E19 Terminology record "élevage du vin", Office

Québécois de la langue française

E20 Entry "élevage" on wordreference.com (https://www.wordreference.com/fren/élevage)

E21 Fornairon-Bonnefond, C. et al., État des connaissances scientifiques actuelles sur le phénomène d'autolyse des levures et l'élevage des vins sur lies, J. Int. Sci. Vigne Vin 2001, 35, no. 2, pages 57 to 78

E22 Vivas, N. et al., Modélisation et calcul du bilan des apports d'oxygène au cours de l'élevage des vins rouges. II. Les apports liés au passage d'oxygène au travers de la barrique, Progrès Agricole et Viticole 1997, 114, no. 13-14, pages 315 to 316

VII. In preparation for the oral proceedings, scheduled at the parties' request, the board issued a communication pursuant to Article 15(1) RPBA 2020.

VIII. At the end of the oral proceedings, which took place as a videoconference on 20 September 2022 in the presence of the appellant and respondent, the chair announced the order of the present decision.

IX. Summaries of the appellant's arguments are contained in the reasons for the decision.

X. The respondent's case, where relevant to the present decision, can be summarised as follows.

Main request

- Both D1 and the patent related to the same technical field, namely the oxidative maturation of wines. D1 specifically concerned sherry wines; however, claim 1 of the patent related to wines in

general and therefore did not exclude the sherry wines in D1. The maturation method in D1 was directed to fast maturation. Nevertheless, D1 also acknowledged that the storage period had to be adapted depending on the type of wine to be produced. Hence, D1 was a suitable closest prior-art document.

- The fast maturation in D1 implied that high amounts of oxygen had to come into contact with the wine over a short storage period. Nevertheless, the method in D1 used the same means as the patent, namely an oxygen-permeable plastics material, to achieve its goal. This meant that the rate of oxygen transfer from the atmosphere into the wine was also controlled in the method in D1.

- As correctly set out in the board's communication pursuant to Article 15(1) RPBA 2020, the objective technical problem was to provide a method which yielded a wine with a lower degree of maturation than the sherry wines in D1. The solution to this problem was obvious based on D1 and the common general knowledge of the skilled person. In particular, the values in claim 1 of the main request both for the storage period and the total rate of oxygen transmission were common in the field of wine-making.

- Hence, claim 1 of the main request did not involve an inventive step.

First, second, fifth and sixth auxiliary requests

- Claim 1 of the first, second, fifth and sixth auxiliary requests shared the feature "*so as to get*

[...] Oak barrel aging". This was a result to be achieved and it was not clear whether or not oak barrels were used. Assuming that oak barrels were not used, each claim 1 was not concise. This was because, according to the teaching of the patent, the result to be achieved was the actual consequence of the features of claim 1 of the main request.

- Claim 1 of the second, fifth and sixth auxiliary requests also lacked clarity because of the relative feature "*slow-oxidative effects*".

- Consequently, claim 1 of the first, second, fifth and sixth auxiliary requests did not meet the requirements of Article 84 EPC.

Third, fourth, seventh and eighth auxiliary requests

- Claim 1 of the third, fourth, seventh and eighth auxiliary requests differed from claim 1 of the main request only in that features had been added which related to the configuration of the container. The technical problem solved by these modifications, if any, was not related to the problem which claim 1 of the main request was supposed to solve. These modifications and their general purpose were part of the common general knowledge of the skilled person. Hence, claim 1 of the third, fourth, seventh and eighth auxiliary requests did not involve an inventive step.

Ninth auxiliary request

- The range for the total rate of oxygen transmission given in claim 1 of the ninth auxiliary request

still encompassed values which were common in the field of wine-making. Therefore, the reasoning for claim 1 of the main request still applied. Claim 1 of the ninth auxiliary request did not involve an inventive step.

Tenth auxiliary request

- As evidenced by e.g. E16, it was well known before the priority date of the patent to use suspended oak staves in order to provide wine with an additional flavour. Claim 1 of the tenth auxiliary request therefore did not involve an inventive step.

XI. The parties' final requests were as follows.

The appellant requested that the decision under appeal be set aside and that the patent be maintained as granted (main request), and alternatively that the patent be maintained in amended form based on one of the sets of claims in the first to tenth auxiliary requests filed by letter of 22 May 2018. The appellant also requested that E19 to E22 not be admitted into the appeal proceedings.

The respondent requested that the appeal be dismissed, implying that the patent was to remain revoked. It also requested that the first to tenth auxiliary requests filed by letter of 22 May 2018 not be admitted into the proceedings.

Reasons for the Decision

Main request (patent as granted) - inventive step

1. The patent (paragraphs [0004] to [0012]) starts out by explaining why many wines are aged/matured in oak barrels. Oak barrels not only allow the extraction of flavour components contained in the oak, but they also allow atmospheric oxygen to permeate slowly through the walls of the barrel, resulting in controlled and slow oxidation of the wine contained in them. Both aspects (extraction of oak flavour components and slow oxidation) contribute to the development of the desired bouquet/character of the wine.

   However, oak barrels also have a number of drawbacks. They are expensive to fashion, cumbersome to store and handle, often inconsistent in wood properties, subject to leakage and limited in useful life. Furthermore, they require a voluminous storage facility with a controlled temperature and humidity environment to minimise evaporative loss due to transpiration through their porous walls.

2. In a nutshell, the patent relates to a method by means of which comparable oxidative ageing of wine can be achieved but without having to resort to oak barrels, thus avoiding the drawbacks associated with their use.

   The method in the only independent claim 1 of the main request reads as follows:

   > "*A method of controlling the rate of oxygen transfer from the atmosphere into wine comprising, storing the wine in a closed container (4) having*

walls exposed to the atmosphere at atmospheric pressure,
wherein the container (4) is self supporting and the walls of the container comprise a rigid plastics material which allows oxygen to permeate the walls directly from the atmosphere into the wine in contact with the walls at a rate of 13 mg to 65 mg of atmospheric oxygen per square metre of the wall area for each 1 millimetre of the walls thickness per 24 hour period at room temperature, and
wherein the wine is stored in the container for a period ranging between 4 months and 36 months and the total rate of oxygen transmission into the wine is less than 55 mg/litre of wine/year."

The function of the oak barrels for controlling the permeation of oxygen from the atmosphere into the wine is thus assumed in claim 1 by a "*plastics material*". This plastics material is functionally defined as a material with a specific intrinsic oxygen permeability: an area of one square metre of this material at a thickness of 1 mm allows 13 to 65 mg of oxygen from the atmosphere to permeate within 24 hours.

Claim 1 also refers to a "*total rate of oxygen transmission*" of "*less than 55 mg/litre of wine/year*". Taking this together with the storage period in claim 1 (4 to 36 months, i.e. one third of a year to three years), it can be concluded that one litre of wine will be in contact with less than 3*55 mg, i.e. less than 165 mg, of oxygen during the entire storage period.

3. Closest prior art

3.1 On a more general level, D1 (page 2, line 1 to page 3, line 16) relates to the oxidative maturation of wines, i.e. the same technical field as the patent.

This parallel continues in the design of the actual maturation method. More specifically, D1 (claim 1) discloses (emphasis added)

> "*[a] process for the production of a sherry-style wine wherein young wine ...* ***is stored in contact with an oxygen-permeable plastics material (as herein defined) and oxygen is allowed to permeate into the young wine ... through the said plastics material,*** *storage being effected for a period of time sufficient to produce a sherry-style wine.*"

D1 (page 5, lines 9 to 14) also states that atmospheric air will generally be the source of oxygen and that, consequently, the maturation can be effected by storing young wine in a vessel made of oxygen-permeable plastics material, said vessel being in external contact with the atmosphere.

Therefore, the wine is matured in D1 in the same way as in the patent, namely by storing it in a container made of, or containing, an oxygen-permeable plastics material that allows oxygen from the atmosphere to permeate into the wine stored in the container.

The board therefore agrees with the opposition division and the respondent that D1 should be selected as the closest prior art.

3.2 The appellant argued that the type of liquid content and the way the oxidation was carried out in D1 were completely different from those in the patent. More specifically, D1 referred to sherry wines with a high acetaldehyde content. In contrast, the patent related to wines which preferably had a low acetaldehyde content. Furthermore, the plastics material used in D1 resulted in permeation of large amounts of oxygen over a short period of time, i.e. very fast oxidation. In contrast, the method in claim 1 of the main request was directed to oxidation with lower amounts of oxygen over a longer period of time. These differences meant that D1 related to an invention which was completely different in nature from that of the patent. Consequently, D1 was not suitable as the closest prior art in this case.

The board does not agree. As set out above, claim 1 of the main request relates to a method for the oxidative maturation of wine, but without limiting the wine in any way. Therefore, claim 1 does not exclude the sherry wines in D1, nor is it limited *per se* to wines with a certain chemical composition, such as a certain maximum content of acetaldehyde, as implied by the appellant's argument. While it is true that D1 aims to avoid excessively long storage periods and that the storage periods in the examples in D1 are shorter than those provided in claim 1 of the main request, this does not mean that D1 had to be interpreted as being limited to storage periods shorter than those in claim 1 of the main request. This is because D1 (page 4, lines 9 to 16; claim 1) states very generally that the "*storage [is] effected* ***for a period of time sufficient*** *to produce a sherry-style wine*" (emphasis added). Therefore, D1 acknowledges that the storage period may need to be adapted. In addition, irrespective of any

differences between the patent and D1, both are directed to the same technical field and purpose, namely the maturation of wine. The appellant's argument is therefore not convincing.

4. Distinguishing features

On appeal, the appellant objected to the opposition division's finding (see the decision under appeal, page 12, last two paragraphs) that the subject-matter of claim 1 of the main request was distinguished from D1 only by the following two distinguishing features:

(i) the wine is stored in the container for a period ranging between 4 months and 36 months, and
(ii) the total rate of oxygen transmission into the wine is less than 55 mg/litre of wine/ year.

The appellant argued in particular that D1 disclosed very fast and thus **un**controlled oxidation. D1 therefore did not relate to "*[a] method of* ***controlling*** *the rate of oxygen transfer from the atmosphere into wine*", as provided in claim 1.

In its communication pursuant to Article 15(1) RPBA 2020, the board had explained that the method in D1 nevertheless entailed the control of the rate of oxygen transfer from the atmosphere into wine, irrespective of whether or not D1 and its method was directed to very fast oxidation. This is because the plastics material in D1 does not allow any amount of oxygen to permeate in a given unit of time, but only a limited amount. Therefore, the feature in claim 1 of

controlling the rate of oxygen transfer is not an additional distinguishing feature.

In the appellant's favour, however, the board accepted in the communication that the subject-matter of claim 1 of the main request is distinguished from D1 by the following two additional distinguishing features:

(iii) the plastics material of the walls has an intrinsic oxygen permeation rate of 13 mg to 65 mg of atmospheric oxygen per square metre of the wall area for each 1 millimetre of the walls thickness per 24 hour period at room temperature, and

(iv) the container is self-supporting and the walls of the container comprise a rigid plastics material.

The board's conclusions were not contested by the parties in the further course of the appeal proceedings. The distinguishing features (i) to (iv) above therefore form the basis for the following assessment.

5. Effect

5.1 In its communication pursuant to Article 15(1) RPBA 2020 the board had set out

- that distinguishing features (i) and (ii) have the consequence that one litre of wine will be in contact with less than 3·55 mg, i.e. less than 165 mg, of oxygen during the entire storage period (see also point 2 above), and
- that distinguishing features (iii) and (iv) are not linked to a surprising technical effect.

This was not challenged by the appellant in the further course of the appeal proceedings.

5.2 As calculated by the appellant in Annex 3, the amount of oxygen implied by claim 1 of the main request (i.e. less than 165 mg of oxygen per litre of wine over the entire storage period) is significantly lower than that in the exemplary embodiments in D1. This results in a wine having a lower degree of maturation (referred to by the appellant as table wine).

6. Objective technical problem

6.1 Based on the previous point, the objective technical problem is to provide a method which yields a wine with a lower degree of maturation than the sherry wines in D1. This objective technical problem had already been set out in the board's communication pursuant to Article 15(1) RPBA 2020.

6.2 At the oral proceedings before the board, the appellant argued that an objective technical problem, if any, could only be formulated inadmissibly. If at all, it was to be considered that of changing the properties of the container in D1, which was suitable for the production of sherry, in such a way that it was suitable for producing table wine.

The board does not find this convincing. In this case, the total amount of oxygen to which the wine is exposed during storage is decisive for the type of wine eventually obtained. The only potentially relevant property of the container in this respect is the intrinsic oxygen permeability of the plastics material; however, as the name implies, this is an intrinsic

property of the plastics material. This means that on its own, i.e. without specifying the dimensions of the plastics material (wall area and thickness), as is the case in claim 1, it says nothing about how much oxygen to which the wine is exposed. Therefore, a change in this intrinsic property cannot be said to have an effect on the wine eventually obtained, contrary to the appellant's objective technical problem which assumes just that. Rather, it is the storage period and the total rate of oxygen transmission which determine the total amount of oxygen to which the wine is exposed during storage and these features and their effect have been taken into account by the board in formulating the objective technical problem.

7. Obviousness

7.1 It was common ground between the parties that the maturation of wine is part of the common general knowledge of the skilled person. Put differently, the skilled person knows the amount of oxygen per year needed for the maturation of a litre of a given type of wine (as also set out in T 423/15, point 1.1.5 of the Reasons, which both parties relied on). Consequently, the skilled person would have been well aware that a wine having a lower degree of maturation requires less oxygen than the sherry wines in D1.

As argued by the respondent (letter of 28 February 2022, paragraph bridging pages 7 and 8) and not contested by the appellant, the values given in claim 1 for both the storage period and the total rate of oxygen transmission are conventional in the field of wine-making. These values would therefore have been selected by the skilled person without any inventive skill. To confirm that the selected values would indeed

solve the posed technical problem, i.e. would have resulted in a lower degree of maturation, the skilled person would merely have had to compare the oxygen permeation resulting from the selected values with that of D1.

Also according to D1 (claim 4), the most preferred plastics material is polyethylene having a density of from 0.91 to 0.93 g/cm^3. As argued by the respondent and in fact accepted by the appellant (statement of grounds of appeal, page 5, last paragraph before heading C)), such a plastics material has an intrinsic oxygen permeation which falls within or overlaps with the range in claim 1 of the main request. Without any effect associated with the range recited in claim 1 for the intrinsic oxygen permeation rate, its selection from D1 cannot involve an inventive step; cf. the distinguishing feature (iii).

Finally, according to D1 (page 7, lines 1 to 6), the plastics material can be self-supporting. This implies that the plastics material in D1 is rigid and that the container is self-supporting. Therefore, modifying the container in D1 as stipulated in distinguishing feature (iv) would not have required the skilled person to apply any inventive skill either.

7.2 With regard to obviousness, the appellant referred to the long period between the publication year of D1 (1974) and the filing year of the patent (2004). The patent therefore satisfied a long-felt need. This was an indication of inventive step.

The board, however, concurs with the view expressed e.g. in T 605/91 (point 4.4.1 of the Reasons). The mere fact that a long period of time has elapsed between the

publication of a prior-art document and the patent is not sufficient to prove the existence of a long-felt need. Such a "need" would appear to have persisted only if various and repeated attempts to obtain the invention of the patent starting from an embodiment such as those disclosed in D1 could be identified. This is not the case here.

8. It follows that claim 1 of the main request does not involve an inventive step over D1 as the closest prior art in combination with the common general knowledge of the skilled person. The main request is not allowable.

First, second, fifth and sixth auxiliary requests - clarity, conciseness

9. Claim 1 of the first, second, fifth and sixth auxiliary requests differs from claim 1 of the main request in that the following features (below in bold) have been added:

First auxiliary request

> "*A method of controlling the rate of oxygen transfer from the atmosphere into wine* ***so as to get Oak barrel aging,*** *comprising ...*"

Second auxiliary request

> "*A method of controlling the rate of oxygen transfer from the atmosphere into wine* ***so as to get slow-oxidative effects of Oak barrel aging,*** *comprising ...*"

Fifth auxiliary request

"*A method of controlling the rate of oxygen transfer from the atmosphere into wine* ***so as to get simultaneous extractive and slow-oxidative effects of Oak barrel aging,*** *comprising ...*"

Sixth auxiliary request

"*A method of controlling the rate of oxygen transfer from the atmosphere into wine* ***so as to get simultaneous extractive and slow-oxidative effects of Oak barrel aging, without the need to use such barrels or to add extra oxygen gas or air into the wine*** *comprising ...*"

The added features are not part of the claims as granted. Each claim 1 of the first, second, fifth and sixth auxiliary requests therefore may be assessed for compliance with the requirements of Article 84 EPC.

10. Each of the added features limits the claimed method with the wording "*so as to get [...] Oak barrel aging*". Contrary to the appellant's submission, this wording does not make it clear whether or not oak barrels are actually used in the claimed methods.

It could be argued that the method in each claim 1, due to the wording "***so as to get*** *[...] Oak barrel aging*" (emphasis added), is directed to imitating oak barrels and that this implies a method in which these are in fact not used. This view could be taken in particular for claim 1 of the sixth auxiliary request, which states explicitly "*without the need to use such barrels*"; however, even if this view were accepted, it would still not be comprehensible what exact limitation

the additional feature in question should involve, since the method in claim 1 of the main request is already directed to imitating the oxidative ageing mediated by oak barrels. Therefore, if this view were accepted, each claim 1 would still not be concise.

11. In addition, each claim 1 of the second, fifth and sixth auxiliary requests lacks clarity because of the relative feature "***slow***-*oxidative effects*" (emphasis added).

12. Therefore, each claim 1 of the first, second, fifth and sixth auxiliary requests does not meet the requirements of Article 84 EPC. The first, second, fifth and sixth auxiliary requests are therefore not allowable.

Third auxiliary request - inventive step

13. Claim 1 of the third auxiliary request differs from claim 1 of the main request in that the feature

> "*wherein the container (4) presents an opening in the top defined by a neck*"

has been added.

14. The appellant argued that the neck-shaped opening in the top of the container helped to limit the transfer of oxygen into the wine, thus further slowing down the maturation of the wine in the container.

15. This is not convincing. It is not apparent how the shape of the opening in a container in which the wine is stored could help to limit the transfer of oxygen and thus support slower maturation, at least not as

long as the container is closed, as is explicitly required according to claim 1.

The board therefore shares the respondent's view that the objective technical problem vis-à-vis D1 as the closest prior art can at most be formulated as providing a method

(a) which yields a wine with a lower degree of maturation than the sherry wines in D1 and
(b) which uses an alternative container.

With regard to the main request, it has already been concluded above that the solution in (a) does not require an inventive step. With regard to (b), the board concurs with the respondent's submission, which was not contested by the appellant, namely that a neck-shaped opening as now recited in claim 1 is part of the common general knowledge of the skilled person. Therefore, it would not have required any inventive skill to provide the container in D1 with an opening as now claimed.

16. It follows that claim 1 of the third auxiliary request does not involve an inventive step. The third auxiliary request is not allowable.

Fourth auxiliary request - inventive step

17. Claim 1 of the fourth auxiliary request differs from claim 1 of the third auxiliary request in that the following feature has been added:

> "*and wherein the container comprises, either a base valve (8) is [sic] fitted through a side wall of the container above the base of the container so as*

to enable bottom filling or discharge of the container contents without disturbing sediment that may have settled to the bottom of the container, or a tap (26) provided at the bottom of the container to drain off the wine (28) as and when needed"

The additional feature relates to two alternative embodiments of the container, one with a base valve (8) and one with a tap (26). The following assessment addresses the second alternative.

18. As regards inventive step, the appellant referred to the argument submitted for the third auxiliary request. It also argued that the tap was helpful for taking wine samples during the long storage period and also allowed the wine to drain from the container without disturbing the sediment. In D1, there was no need to solve this problem. This was because the method in D1 was not only directed to very short maturation times during which hardly any sedimentation occurred, but also because the method in D1 even required that the particles remained in suspension.

19. As is clear from the wording of the additional feature, the tap, unlike the base valve, is not limited in such a way that the sediment in the container is not disturbed, e.g. when wine is drained. The board agrees with the respondent that this effect is not achieved with every tap provided at the bottom of the container, i.e. not over the entire breadth of claim 1. As is well known from common experience, liquid discharged from a tap which is only slightly above the surface of sediment can generate turbulence around the tap outlet, causing the sediment to be stirred up around the outlet; however, in the appellant's favour, it is

accepted that the tap is helpful for taking e.g. wine samples from the container during the storage period.

Therefore, the objective technical problem can be formulated as providing a method

(a) which yields a wine with a lower degree of maturation than the sherry wines in D1 and
(b) which uses an alternative container with which e.g. wine samples can be taken during the storage period.

It has already been concluded above that the solution in (a) does not require an inventive step. With regard to (b), the board concurs with the respondent's submission, which was not contested by the appellant, namely that a neck-shaped opening, a tap at the bottom of a container and the suitability of said tap for taking samples from the liquid stored inside are part of the common general knowledge of the skilled person. Therefore, it would not have required any inventive skill to modify the container in D1 as now recited in claim 1 to solve problem (b) above.

20. It follows that claim 1 of the fourth auxiliary request does not involve an inventive step. The fourth auxiliary request is not allowable.

Seventh auxiliary request - inventive step

21. Claim 1 of the seventh auxiliary request differs from claim 1 of the third auxiliary request in that the feature below in bold has been added:

"*wherein the container (4) presents an opening in the top defined by a neck* ***formed as a cylinder forming part of the tank***"

22. As regards inventive step, the appellant referred to the arguments submitted for the third auxiliary request.

23. In the absence of arguments as to what effect the additional feature "*formed as a cylinder forming part of the tank*" compared with claim 1 of the third auxiliary request should have, the board can only conclude that the objective technical problem vis-à-vis D1 is the same as that formulated above for claim 1 of the third auxiliary request, i.e. to provide a method

(a) which yields a wine with a lower degree of maturation than the sherry wines in D1 and
(b) which uses an alternative container.

24. It has already been concluded above that the solution in (a) does not require an inventive step. With regard to (b), the board agrees with the respondent that the opening recited in claim 1 of the seventh auxiliary request is still part of the common general knowledge of the skilled person, even with the added feature. This was not disputed by the appellant, either.

For the reasons mentioned above with regard to claim 1 of the third auxiliary request, claim 1 of the seventh auxiliary request therefore does not involve an inventive step either. The seventh auxiliary request is not allowable.

Eighth auxiliary request - inventive step

25. Claim 1 of the eighth auxiliary request differs from claim 1 of the main request in that the following feature has been added:

> "*wherein the container is employed which has a neck (21) sealable by a closure (22), the neck being wide enough to allow a person's hand access to internal surfaces of the container*"

26. According to the appellant, the added feature had the effect that the container could be cleaned easily after the end of the storage period. This was important because the method according to claim 1 was based on a long storage period during which sediments formed that were difficult to remove from the container. In contrast, the method in D1 was directed to very short storage periods. There was therefore no need to solve this problem in D1.

27. Assuming, in the appellant's favour, that the container can be easily cleaned after the end of the storage period due to the additional feature, the objective technical problem vis-à-vis D1 can be formulated as providing a method

(a) which yields a wine with a lower degree of maturation than the sherry wines in D1 and
(b) which uses a container which can be cleaned easily after the end of the storage period.

28. With regard to the main request, it has already been concluded above that the solution in (a) does not involve an inventive step.

With regard to (b), the board agrees with the respondent that an opening in the form of a neck, which opening is sealable by a closure, is part of the common general knowledge of the skilled person. This was not disputed by the appellant, either. The board also shares the respondent's view that, when seeking to provide a container which can be cleaned easily, it is entirely routine to provide it with an opening having a diameter large enough to allow easy access to the container. Designing the opening to be wide enough for a person's hand to be able to enter the container is an arbitrary choice which cannot involve an inventive step. Therefore, the skilled person would have modified the container in D1 as recited in claim 1 of the eighth auxiliary request without any inventive skill.

It follows that claim 1 of the eighth auxiliary request does not involve an inventive step. The eighth auxiliary request is not allowable.

Ninth auxiliary request - inventive step

29. Claim 1 of the ninth auxiliary request differs from claim 1 of the main request in that the total rate of oxygen transmission into the wine has been limited from "*less than 55 mg/litre of wine/year*" to a "*range of 20-30 mg/litre of wine/year*".

30. The board does not see any technical effect linked to the narrower range beyond that already identified above for claim 1 of the main request (lower degree of maturation than the sherry wines in D1), and the appellant did not point to any such effect either.

31. According to the respondent, the range for the total rate of oxygen transmission given in claim 1 of the

ninth auxiliary request still encompassed values which were common in the field of wine-making. This was not disputed by the appellant.

Therefore, with the reasoning for claim 1 of the main request applying, *mutatis mutandis*, it must be concluded that claim 1 of the ninth auxiliary request does not involve an inventive step either. The ninth auxiliary request is not allowable.

Tenth auxiliary request - inventive step

32. Claim 1 of the tenth auxiliary request differs from claim 1 of the main request in that the following feature has been added:

> "*and wherein oak staves (5) are suspended in the wine during the storage period*"

33. The appellant pointed to the patent (paragraph [0005]) and explained that oak barrels allowed the extraction of oak flavour components by the wine stored in them and that the same had to occur when oak staves were suspended in wine during the storage period.

34. Accepting the appellant's submission in its favour, the objective technical problem vis-à-vis D1 can be formulated as providing a method

(a) which yields a wine with a lower degree of maturation than the sherry wines in D1 and
(b) which gives the wine an additional flavour.

35. In the appellant's view, the objective technical problem instead had to be formulated more broadly as that of providing a method of maturation of wine in

which the oak barrels were replaced while maintaining their advantages without their inconveniences.

The formulation of the objective technical problem suggested by the appellant cannot be accepted, at least not with regard to D1 as the closest prior art. This is because the appellant's problem implies that D1 uses oak barrels, but this is not the case. Put differently, the problem formulated by the appellant is already solved by D1 in the same way as in claim 1, namely by using plastic containers instead of oak barrels.

36. With regard to the main request it has already been concluded above that the solution in (a) does not require an inventive step.

Furthermore, it was known before the priority date of the patent, e.g. from E16, that wine can be given an additional flavour by suspending oak staves in it. The skilled person would therefore have done precisely this when seeking to solve problem (b) above.

37. It follows that claim 1 of the tenth auxiliary request does not involve an inventive step. The tenth auxiliary request is not allowable.

Requests relating to the admittance of the first to tenth auxiliary requests and E19 to E22

38. As is clear from the foregoing assessment,

- none of the first to tenth auxiliary requests is allowable and
- none of E19 to E22 is relevant for this decision.

Therefore, it was not necessary at the oral proceedings to decide

- on the respondent's request that the first to tenth auxiliary requests not be admitted into the proceedings and
- on the appellant's request that E19 to E22 not be admitted into the proceedings.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

N. Maslin M. O. Müller

Decision electronically authenticated