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Datasheet for the decision of 12 March 2014

Case Number: T 0185/11 - 3.3.06

Application Number: 02745591.4

Publication Number: 1404801

IPC: C11D17/04

Language of the proceedings: EN

Title of invention:
DISHWASHING COMPOSITION

Patent Proprietor:
Reckitt Benckiser N.V.

Opponent:
Henkel AG & Co. KGaA

Headword:
PVA-enclosed dishwashing product / RECKITT BENCKISER

Relevant legal provisions:
EPC Art. 100(b), 52(1), 56

Keyword:
Late-filed document - admitted (yes)
Sufficiency of disclosure - (yes)
Inventive step (Main Request): yes

Decisions cited:
T 0575/05

Catchword:

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Case Number: T 0185/11 - 3.3.06

D E C I S I O N
of Technical Board of Appeal 3.3.06
of 12 March 2014

Appellant: (Opponent)	Henkel AG & Co. KGaA Henkelstrasse 67 40589 Düsseldorf (DE)
Representative:	Stevermann, Birgit Henkel AG & Co. KGaA VTP Patente 40191 Düsseldorf (DE)
Respondent: (Patent Proprietor)	Reckitt Benckiser N.V. Siriusdreef 14 2132 WT Hoofddorp (NL)
Representative:	Bowers, Craig Malcolm Reckitt Benckiser Corporate Services Limited Legal Department - Patents Group Dansom Lane Hull HU8 7DS (GB)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 12 November 2010 concerning maintenance of European Patent No. 1404801 in amended form.**

Composition of the Board:

Chairman: B. Czech
Members: P. Ammendola
S. Fernández de Córdoba

Summary of Facts and Submissions

I. This appeal of the Opponent is from the interlocutory decision of the Opposition Division concerning maintenance of European Patent No. 1 404 801 in amended form.

II. The patent in suit had been opposed on the ground of *inter alia* lack of inventive step. In the opposition proceedings reference had been made, *inter alia*, to documents:

D3 = WO 01/04258 A1;

D14 = ASTM D2024-65 (2003) Standard Test Method for Cloud Point of Nonionic Surfactants;

D15 = DE 60 2004 008 517 T2;

D16 = "*Fettalkoholpolyglykolether*" COGNIS Data Sheet 2009;

D17 = "*Nichtionische Tenside*" Wikipedia article printout dated 15 May 2009;

D18 = "*Plurafac LF Marken*" BASF Data Sheet 1994;

D19 = "*Pluronic L61 Block Copolymer Surfactant*" BASF Data Sheet 2002;

D20 = "*Alcohols Ethoxylates*" SASOL Brochure, no publication date but reference (on page 5) to an Official Journal of the EU published in 2003.

and

D21 = Kirk Othmer - Encyclopedia of Chemical Technology, 3rd Ed., 1983, Vol. 22; Section "*Surfactants and Detersive Systems*", pages 360 to 379.

III. In the decision under appeal the Opposition Division found that the amended version of the patent in suit according to the then pending Auxiliary Request (claims 1 to 3 filed with letter of 18 March 2010; description pages 2 to 15 adapted thereto filed at the oral proceedings before the Opposition Division) met the requirements of the EPC. The Opposition Division found *inter alia* that the claimed **a**utomatic **d**ishwashing **process** (below **AD process**) was sufficiently disclosed and non-obvious for the skilled person started from the closest prior art disclosed in document D3.

IV. Claim 1 held allowable by the Opposition Division reads as follows:

"*1. Process for automatic dishwashing using a cleaning product comprising at least one surfactant having a cloud point in the range from 20°C to 70°C, wherein said surfactant is released into the wash liquor during the cleaning cycle of the automatic dishwashing process only when or after the temperature of the wash liquor has reached the cloud point of said surfactant, wherein said cleaning product is contained in an enclosure which comprises polyvinylalcohol, and further wherein the surfactant content of the product is between 2 and 60 wt.%, more preferably between 4 and 50 wt.%, most preferably between 5 and 40 wt.%.*"

Dependent claims 2 and 3 define preferred embodiments of said AD process.

V. In its statement of grounds of appeal the **Appellant** (Opponent) only disputed the Opposition Division's findings of sufficient disclosure and of non-obviousness. Regarding sufficiency of the disclosure, it referred to documents D14 to D20 to show that different methods for measuring the cloud point gave different results, and indicated the case numbers of several Board of Appeal decisions. As regards inventive step, it held *inter alia* that the claimed method was obvious in the light of document D3 taken as the closest prior art.

VI. In its reply dated 27 July 2011, the **Respondent** (Patent Proprietor) rebutted the objections of the Appellant. With said reply it enclosed

- a set of claims 1 to 3 labelled "Main Request" , said claims being identical to claims 1 to 3 held allowable by the Opposition Division;

and

- a set of three claims labelled "First Auxiliary Request".

VII. The Board summoned the Parties to oral proceedings to be held on 12 March 2014.

VIII. With a letter dated 12 February 2014 the Appellant filed document

D22 = A. Bonfillon-Colin *et al.*, "*Why Do Ethoxylated Nonionic Surfactants Not Foam at High*

Temperature?"; Langmuir, vol. 13, no. 4, 1997, pages 599 to 601

as evidence of common general knowledge that surfactant aqueous solutions showed significantly lower foaming at temperatures above the surfactant **c**loud **p**oint (below **CP**).

IX. The Respondent filed with letter dated 24 February 2014 a set of three amended claims labelled "Second Auxiliary Request", as well as three sets of amended pages 3 to 5 and 12 to 14 of the patent description respectively labelled "Main Request", "First Auxiliary Request" and "Second Auxiliary Request".

X. At the oral proceedings:

- the Respondent withdrew the set of amended description pages labelled "Main Request" filed with letter of 24 February 2014;

- sufficiency of disclosure was debated with regard to the CP value range comprised in claim 1 according to the Main Request; reference being made to documents D16 to D21

and

- the Appellant's sole line of argument with regard to the issue of inventive step was that the AD process of claim 1 (Main Request) was obvious in view of document D3 and common general knowledge as illustrated by document D22.

XI. The Appellant requested that the decision under appeal be set aside and that European patent No. 1 404 801 be revoked.

The Respondent requested that the appeal be dismissed (Main Request) or, alternatively, that the patent be maintained in amended form on the basis of the claims according to the First Auxiliary Request filed with the reply to the grounds of appeal and the description pages 3 to 5 and 12 to 14 of the First Auxiliary Request filed with letter of 24 February 2014, or on the basis the basis of the claims and the description pages 3 to 5 and 12 to 14 of the Second Auxiliary Request filed with letter of 24 February 2014.

XII. The Parties' arguments of relevance with regard to the Respondent's Main Request can be summarised as follows:

The **Appellant** held that document D22 should be admitted into the proceedings since it merely evidenced common general knowledge.

It argued that the AD process of maintained claim 1 was insufficiently disclosed because no specific method for measuring the CP of the surfactant was directly described in the patent in suit or implicitly identified by the reference to document D21 contained in paragraph [0039] of the maintained patent description. In its opinion, documents D14 to D20 proved instead that several different methods were known and normally used for measuring this parameter, and that these methods may result in very different CP values for a given surfactant. In particular, document D19 proved the substantial variability of CP values measured in water, depending on the concentration of the surfactant. Data Sheets D18 and D20 also described

surfactants for which the difference between the measured CP values - at **1%** wt. concentration of the surfactant in (pure) **w**ater (below **CPw1%**) and at 5% wt. surfactant concentration in a 25% solution of **b**utyl**d**i**g**lycol (below **CPbdg**), respectively - made it impossible to conclude with certainty whether their CP values were to be considered to be within or outside the range indicated in claim 1 (referred to below as **unclassifiable** surfactants).

The Appellant conceded that document D18 also described surfactants for which both the CPw1% and the CPbdg values were within the range of 20°C to 70° defined in claim 1 at issue and, thus, appeared to pose no problem for carrying out embodiments of the invention. Nevertheless, the proven existence of unclassifiable surfactants was sufficient to conclude that the requirement of Articles 83/100(b) EPC was not met. In this connection, the Appellant referred to decision T 575/05 of 24 April 2007.

As regards inventive step, the Appellant concurred with the finding of the Opposition Division that the closest prior art was represented by the AD processes of the examples of document D3, which were based on the use of a detergent portion whose components were packed in **p**oly**v**inyl**a**lcohol **films** (below **PVA films**) soluble either in cold water, or in water at 40°C or in water at 60°C, so that the different components were delivered at different moments of the AD process. It maintained that it was apparent to the skilled reader of this citation (in particular from the combination of the examples disclosed on pages 68 to 70 with the general description from page 43, line 14 to page 44, line 2, and on page 61, lines 1 to 5) that also the non-ionic surfactant component (labelled as component K4) used in

the exemplified AD processes of document D3 was packed in (at least) one of these three PVA films.
The Appellant additionally stressed that the amount of component K4 used in the examples of document D3 was also in accordance with the minimum amount required in claim 1 at issue. Thus, it was justified to expect that also the AD processes of the prior art achieved "carry-over" of the surfactant into the rinse cycle and, thus, that this latter also acted as rinse aid. Accordingly, the same "*good spotting results*" that were apparently achieved in the claimed AD process possibly in consequence of such "carry-over" (see paragraph [0139] of the maintained patent description in combination with paragraph [0011]), were also to be expected in the examples of document D3.

Hence, the sole technical problem plausibly solved by the subject-matter of claim 1 at issue vis-à-vis the prior art described in D3 was the provision of a further AD process that ensured low foaming.

In the opinion of the Appellant, the indication in document D3 itself to use "schwachschäumenden Niontenside" as conventional rinse aids and the common general knowledge illustrated by D22, rendered obvious for the skilled reader of the examples of document D3, to pack the surfactant with a PVA film that only dissolved when the temperature of the wash liquor was above the CP of that surfactant. Thus, to arrive at the AD process of maintained claim 1 only required to further arbitrarily select among the non-ionic surfactants disclosed in document D3 (see in document D3 from page 43, line 14 to page 44, line 2) those with a cloud point between 20°C and 70°C.

The **Respondent** expressly stated not to have any objection to the admission into the appeal proceedings of document D22 despite its late filing, since this document was only invoked for proving common general knowledge that was anyhow implied in the last sentence of paragraph [0025] of the patent description at issue.

It rebutted the objection regarding sufficiency of disclosure by stressing that the CP was a conventional parameter normally used for characterizing surfactants and that, as evident e.g. from Document D21, it was normally to be measured in pure water. The Respondent was not aware of the reason why e.g. also the CPbdg was frequently used for characterizing surfactants. There were plenty of surfactants (such as most of those reported in document D18) for which the reported CP value or values were all within the CP range of 20°C to 70°C defined in claim 1. Hence, surfactants which complied with the CP requirement in claim 1, independently on which of the relevant conventional methods was used for determining their CP, were commercially available. Thus, the skilled person was in the position to carry out many embodiments of the AD process of claim 1 at issue, e.g. simply upon consulting the data sheets available for the commercial surfactants. The mention in documents D18 to D20 of some unclassifiable surfactants would lead the skilled person to opt for one of the other surfactants also disclosed in these citations which were undisputedly suitable for carrying out the claimed AD process. The Respondent stressed that also in the established jurisprudence of the Boards of Appeal of the EPO the omitted indication in a patent of details as to how to measure a parameter only resulted in a finding of insufficiency of disclosure when the missing

information was so fundamental to render the required parameter technically nonsensical.

As to the assessment of inventive step, the Respondent stressed that there was no reason to believe to the Appellant's unsupported allegation that the spotting results provided by the claimed AD process had already been achieved in the process of document D3. It additionally maintained that even if the technical problem solved vis-à-vis this prior art were merely considered to consist in the provision of an AD process with reduced foaming, still the combination of documents D3 and D22 could not possibly render obvious the process of claim 1 at issue.

The only solution to this problem that the prior art rendered obvious was the one adopted according to the prior art referred to in paragraph [0011] of the patent in suit, i.e. the use of surfactants with low foaming and low CP. None of D3 or D22 disclosed or suggested the use of surfactants with moderate to high CP. Nor did these citations contain any pointer to a delayed delivery of the surfactant.

Hence, the Appellant's objection with respect to inventive step had to be rejected.

Reasons for the Decision

Procedural issues

1. Admissibility of late-filed document D22

1.1 This citation was filed by the Appellant after having been summoned to oral proceedings, more particularly one month before the date of said oral proceedings, in order to illustrate common general knowledge (see above Section VIII of the Facts and Submissions).

1.2 The Board took into account the following aspects:

- As observed by the Respondent, the common general knowledge to be illustrated is manifestly implied anyway in the last sentence of paragraph [0025] of the maintained patent description.

- The Respondent not only raised no objection to the admission of D22, but explicitly referred to this document and the common general knowledge in question when presenting its arguments.

- This filing of D22 raised no further, let alone complex issues.

1.3 Considering all the above aspects the Board, exercising its discretion under the provisions of Article 114(2) EPC and Article 13(3) RPBA, decided to admit document D22 into the proceedings despite its late filing.

Respondent's Main Request
(Patent in the version held allowable by the Opposition Division)

2. Sufficiency of disclosure

2.1 Articles 100(b)/83 EPC 1973 stipulate that the invention must be disclosed "in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art".

2.2 The AD process defined in the maintained claim 1 requires the use of "*at least one surfactant having a cloud point in the range from 20°C to 70°C*".

2.3 For the Board, in the present case, the issue of sufficiency boils down to the question of whether or not, taking into account the whole content of the application as filed and common general knowledge, a skilled person was able, on the filing date of the patent, to identify surfactants suitable for carrying out the invention, i.e. the process according to claim 1 at issue.

2.4 The Appellant considered (see above Section XII of the Facts and Submissions) that the disclosure provided by the patent in suit was insufficient because the method to be used for measuring the CP of the surfactant was not indicated . At the oral proceedings, it referred to documents D16 to D20 to prove

a) that several different methods were known and available for measuring the CP of surfactants and that said methods could result in different CP values for a given surfactant; and

b) that, consequently, certain prior art surfactants were **unclassifiable** in terms of the definition of the surfactant provided in claim 1 at issue, because their CP value was within the range of 20°C to 70°C when determined with one conventional measuring method, whilst being outside the same range when measured according to another of the conventional measuring method.

2.5 As pointed out by the Respondent, the patent in suit (paragraph [0139]) refers to two specific surfactants together with an indication of their respective cloud points, i.e. Plurafac® LF221 (CP 33°C) and Lutensol® AT11 (CP 87°C). As apparent from D18, it was known that Plurafac® LF221 has a CP of 33°C in water (measured according to DIN 53917). From said paragraph [0139], the skilled person thus gathers that a surfactant such as Plurafac® LF221 with a CP within the range of from 20 to 70 °C, measured using a diluted solution thereof in water (see in this respect D21, paragraph bridging pages 360 and 361), is potentially suitable for being used in the process according to claim 1 at issue.

2.6 Such surfactants were known and even commercially available at the filing date of the patent in suit, see e.g. document D18, which is the only one among documents D14 to D20 made available to the public before the filing date of the patent in suit.
As pointed out by the Appellant, for some of said surfactants more than one CP value is reported and, in some cases, one CP lies within the claimed numerical range and another value outside of said range.

2.7 The Appellant, however, acknowledged at the oral proceedings that document D18 also disclosed several commercially available surfactants for which,

respectively, the two differing reported CP values both meet the criterion of claim 1 at issue. More particularly, D18 discloses eight commercial surfactants with reported CPw1% and CPbdg values that are both within the claimed range of 20°C to 70°C, see "LF 031" (40°C/60°C), "LF 120" (28°C/43°C), "LF 220" (42°C/48°C), "LF 221" (33°C/43°C), "LF 400" (33°C/46°C), "LF 600" (55°C/57°C), "LF 711" (36°C/45°C) and "LF 1430" (35°C/39°C).

2.8 In view of this disclosure of document D18 the Board accepts as plausible, on the balance of probabilities, that on the filing date of the patent in suit the skilled person had at his disposal a number of (even commercially) surfactants complying with certainty with the CP requirement according to claim 1 at issue, i.e. irrespective of the measuring method used to determine their CP, provided said method is conventional and technically sensible (in terms of surfactant concentration and composition of the aqueous test liquid). For the Board, the fact that there is a lack of certainty concerning the suitability of the unclassifiable surfactants for the purpose of the invention is a matter of unclear boundaries of claim 1 but does not represent an unsurmountable obstacle to the skilled person wanting to carry out the claimed invention.

2.9 The Appellant nevertheless argued that the existence of unclassifiable surfactants justified *per se* the conclusion that the disclosure provided by the patent in the version at issue was insufficient. In its opinion, the present case was comparable to the one underlying decision T 575/05, wherein it was also found that insufficiency of disclosure arose from the lack of information concerning the method to be used for

measuring an essential parameter value referred to in the claims.

2.9.1 For the Board, however, the mere existence of unclassifiable surfactants has no immediate bearing on the finding under point 2.8 above, i.e. that a number of surfactants suitable for carrying out the claimed AD process were available to the skilled person on the filing date of the patent in suit.

2.9.2 Moreover, the circumstances of the present case are substantially different from those of the case underlying decision T 575/05. In the latter case, in contrast to the present case,
- the availability of prior art entities complying with certainty with the quantitative parametric requirement formulated independently on the method to be used for measuring the parameter value was not even alleged by the Patent proprietor (see in T 575/05 point 1 of the Reasons as well as the arguments of the Respondent in Section XII of the Facts and Submission); and
- the patent in suit apparently did not describe or mention a specific, commercially available prior art product together with the parameter value attributed to this product, thereby permitting to infer some further going information.
Consequently, for the Board, the reasoning given in decision T 575/05 is not directly applicable to the present case.

2.10 In summary, the Board is satisfied that at the filing date of the patent in suit the skilled person was in the position to identify without undue burden a number of surfactants meeting the CP criterion of claim 1 and , hence, to carry out the process according to claim 1 at issue.

2.11 In the Board's judgement, the claimed invention according to the patent in suit in the version according to the Main Request meets the requirement of Articles 83/100(b) EPC 1973.

3. Inventive step

3.1 The invention

3.1.1 The invention concerns an AD process using a cleaning product which is contained in an enclosure and comprises at least one surfactant.

3.1.2 From paragraphs [0001] to [0015] of the patent description at issue it can be understood that the process of the invention is supposed to provide good cleaning and rinse performance, in particular in terms of spotting results, with low foaming.

3.1.3 The comparison between paragraphs [0011], [0012] and [0015] suggests that the level of rinse performance to be achieved is about the same as the one already achieved in the prior art when using during washing a high content of low foaming surfactants (implicitly having a low cloud point) so that part of these latter is "carried-over" in the rinse cycle.

3.2 Closest prior art

3.2.1 The Board sees no reason to depart from the finding of the Opposition Division, that the closest prior art is represented by any of the AD processes exemplified in document D3. This was also common ground between the parties at the oral proceedings.

3.2.2 Indeed, document D3 (page 4, second paragraph in combination with examples 1 to 4 on pages 66 to 71) undisputedly discloses AD processes making use of detergent products contained in an enclosure.

Said examples describe the use of a detergent portion comprising 2 wt.% of a non-ionic surfactant (labelled as component K4) and whose ingredients are packed (as single-ingredient components or as multi-ingredient components) in three sorts of PVA films: i.e. in PVA soluble either in cold water, or in water at 40°C or in water at 60°C. The PVA film packing renders possible to control the moment/temperature of the AD process at which the the packed ingredient(s) is(are) delivered. The meaning of "cold temperature" is not further specified in D3, but the temperature profile of the exemplified processes starts at 15°C (see the first line on page 69 of document D3). It may also be noted that according to the general teaching in this citation the wash liquor preferably reaches temperatures above 55°C in the rinse cycle only (see e.g. the paragraph bridging pages 34 and 35 of document D3).

3.2.3 It is not clearly indicated in Table 3 of document D3 that one of the three specified PVA films was actually used to pack the non-ionic surfactant component K4.

The Board nevertheless accepts that the only technically sensible interpretation of the examples of document D3 is that also component K4 must necessarily have been packed in at least one of the three PVA films, as submitted by the Appellant with reference to the sentence on page 68 of D3 reading "Die in Tabelle 2 aufgeführten Reiniger-Komponenten K0 bis **K4** wurden in der aus Tabelle 3 ersichtlichen Weise eingeschweisst in ...." (emphasis added by the Board).

3.3 Technical problem

3.3.1 The technical problem to be solved in the light of the closest prior art D3 consists, for the Board, in the provision of a further AD process wherein low foaming is ensured.

3.3.2 The Respondent's allegation that the claimed AD process would also provide better spotting results is not convincing and hence not taken into account in the formulation of the technical problem, if only because the patent in suit confirms (compare paragraphs [0139] and [0141]) that whether the surfactant
- is not packaged and, thus, present in the wash liquor already at the beginning of the AD process,
or
- is enclosed in the film package and, thus, released in a later stage of the process
has no apparent impact on the achieved spotting results.

3.4 Solution

3.4.1 As a solution to this technical problem, the patent in suit proposes the AD process according to claim 1 at issue, which is characterised in particular
in that the "*cleaning product is contained in an enclosure which comprises polyvinylalcohol*",
in that the surfactant has "*a cloud point in the range from 20°C to 70°C*", and "*is released into the wash liquor during the cleaning cycle of the automatic dishwashing process only when or after the temperature of the wash liquor has reached the cloud point of said surfactant*".

3.4.2 It was common ground between the parties that in the context of the patent in suit the claimed solution implies that the PVA-containing enclosure must only dissolve when the temperature of the wash liquor is at least equal to or higher than the cloud point of the surfactant.

3.5 Success of the solution

3.5.1 The measure of releasing the surfactant into the wash liquor only once the temperature of the wash liquor is equal to or higher than the surfactant's cloud point ensures that low foaming is achieved across the whole ambit of claim 1 at issue. This was not in dispute and the Board sees no reason to call this into question.

3.6 Obviousness

3.6.1 Hence, it remains to be assessed whether starting from the process according to D3 the claimed solution was obvious in the light of common general knowledge and/or the prior art relied upon by the Appellant.

3.6.2 In the Appellant's opinion, a skilled person
- starting from the processes exemplified in document D3 and noting that this citation also discloses the use of low foaming non-ionic surfactants ("schwachschäumende Niotenside" as conventional rinse aids (D3: page 61, lines 1 to 5),

- trying to solve the posed technical problem (see point 3.3.1 *supra)*,
and

- taking into account common general knowledge (D22: paragraph bridging the two columns on page 599), i.e. that aqueous solutions of a non-ionic surfactant foam less at temperatures above their cloud point,

would obviously consider modifying the processes disclosed in D3 by making sure that the PVA film used for packing the surfactant only dissolves when the temperature of the wash liquor is above the cloud point of the used surfactant.

Arriving at an AD process according to claim 1 at issue thus only required the arbitrary choice, among the non-ionic surfactants listed in document D3 as the possible alternatives to the component K4 (see in document D3 from page 43, line 14 to page 44, line 2), of one or more surfactants having a cloud point between 20° and 70°C.

3.6.3 This argumentation is not convincing for the following reasons:

(a) Even taking into account all the technical information implied in document D3, it is not possible to arrive at any sound conclusion as to temperature of the wash liquor and, thus, the moment of the AD process at which the non-ionic surfactant component K4 is released in the processes according to the examples of D3. In these examples, the component K4 might have been released already at the very beginning of the cleaning cycle (i.e. at a temperature of only about 15°C) if this component was packed in the PVA film soluble in cold water. Alternatively, component K4 might have been released in a subsequent moment of the cleaning cycle when the

temperature was about 40°C, or only in the rinse cycle if the non-ionic surfactant K4 was packed in the PVA soluble in water at 60°C.

(b) D3 does not mention the cloud points of any surfactant.

(c) Excluding ex-post facto considerations, the expression low foaming non-ionic surfactants ("schwachschäumenden Niontenside") as used in document D3 must, for the Board, be understood to refer to low foaming and hence low cloud point rinse aid surfactants such as those also mentioned in paragraph [0011] of the patent in suit and cannot reasonably be considered to refer to surfactants as defined in claim 1 at issue.

(d) The Board concludes that document D3 contains no direct or indirect pointer to surfactants which having a CP in the range of 20°C to 70°C, i.e. to "*moderate to high cloud point surfactants*" (see paragraph [0015] of the patent in suit).

(e) Document D22 illustrating common general knowledge neither implies nor refers explicitly to the use of moderate to high cloud point surfactants in general, let alone their use in AD processes.

(f) In the absence of any direct or indirect pointer to the possibility of using these surfactants in AD processes, the prior art referred to by the Appellant cannot possibly suggest solving the above-identified technical problem by using a cleaning product containing surfactants with a cloud point in the range of from 20°C to 70°C, let alone in combination with a packaging PVA film

that only dissolves when the temperature of the wash liquor is at least equal to or higher than the cloud point of the surfactant.

3.7 On the contrary, the Board finds convincing the argument of the Respondent that starting from document D3 and taking into account common general knowledge, the skilled person person was rather induced to explore the possibility of solving the posed technical problem by replacing component K4 (of unknown cloud point) with any surfactant known to have a low cloud point, such as the low foaming non-ionic surfactants ("schwachschäumenden Niontenside") explicitly mentioned in document D3 itself. Indeed, these surfactants might be predicted to always be low foaming during the entire AD process, i.e. regardless also of the type of PVA film used for packing it.

3.8 The Board concludes that the claimed solution is not obvious in the light of the prior art and common general knowledge invoked by the Appellant.

3.9 Hence, in the Board's judgement, the subject-matter of claim 1 at issue and, consequently, also the subject-matters of claims 2 and 3 dependent thereon, involve an inventive step (Articles 52(1) and 56 EPC 1973).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

D. Magliano B. Czech

Decision electronically authenticated