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**Datasheet for the decision
of 21 September 2020**

Case Number: T 0241/18 - 3.3.03

Application Number: 04784378.4

Publication Number: 1668046

IPC: C08F4/649, C08F10/06,
C08F4/646, C08F110/06

Language of the proceedings: EN

Title of invention:

SELF LIMITING CATALYST COMPOSITION AND PROPYLENE POLYMERIZATION
PROCESS

Patent Proprietor:

W.R. Grace & CO. - CONN.

Opponent:

Basell Poliolefine Italia S.r.l.

Relevant legal provisions:

EPC Art. 54, 56, 83, 123(2)
RPBA Art. 12(4)
RPBA 2020 Art. 13(2), 25(2), 25(3)

Keyword:

Late-filed documents - admitted (no)- construction of new case on appeal (D9, D10)

Late-filed objection - admitted (no) raised after issue of the summons to oral proceedings; had been raised in opposition but was not invoked in the statement of grounds

Amendments - added subject-matter (no)

Sufficiency of disclosure - (yes)

Novelty - (yes)

Inventive step - (yes)

Decisions cited:

T 0012/81, T 0198/84, T 0472/88, T 0182/89, T 0279/89,

T 0019/90, T 0927/04, T 0339/05, T 1063/06, T 1051/09,

T 0759/10



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Case Number: T 0241/18 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 21 September 2020

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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
24 November 2017 concerning maintenance of the
European Patent No. 1668046 in amended form.**

Composition of the Board:

Chairman D. Semino
Members: M. C. Gordon
W. Ungler

Summary of Facts and Submissions

- I. The appeal lies from the interlocutory decision of the opposition division according to which European patent number 1 668 046 could be maintained in amended form on the basis of the main request, filed with letter of 20 July 2016.
- II. The patent was granted with a set of 12 claims, whereby claim 1 read as follows:

"A catalyst composition for the polymerization of propylene or mixtures of propylene and one or more copolymerizable comonomers, said catalyst composition comprising one or more Ziegler-Natta procatalyst compositions comprising one or more transition metal compounds and one or more esters of aromatic dicarboxylic acid internal electron donors; one or more aluminum containing cocatalysts; a selectivity control agent (SCA), wherein the SCA is selected from the group consisting of: dicyclopentyl dimethoxysilane, di-tert-butyl dimethoxysilane, methylcyclohexyl dimethoxysilane, ethylcyclohexyl dimethoxysilane, diphenyl dimethoxysilane, diisopropyl dimethoxysilane, di-n-propyl dimethoxysilane, diisobutyl dimethoxysilane, di-n-butyl dimethoxysilane, cyclopentyl trimethoxysilane, isopropyl trimethoxysilane, n-propyl trimethoxysilane, n-propyl triethoxysilane, ethyl triethoxysilane, tetramethoxysilane, tetraethoxysilane, cyclopentyl pyrrolidinodimethoxysilane, bis(pyrrolidino)-dimethoxysilane, and bis(perhydroisoquinolino)dimethoxysilane; and one or more activity limiting agent (ALA) compounds, wherein the ALA is selected from the group consisting of: ethyl acetate, methyl trimethylacetate, isopropyl myristate,

di-n-butyl sebacate, (poly)(alkylene glycol) mono- or diacetates, (poly)(alkylene glycol) mono- or di-myristates, (poly)(alkylene glycol) mono- or di-laurates, (poly)(alkylene glycol) mono- or di-dioleates, glyceryl tri(acetate), mixed glycerides of linoleic, oleic, palmitic and stearic acids, and mixtures thereof, wherein the total quantity of selectivity control agent employed is limited to provide a molar ratio, based on transition metal, from 0.1 to 500, said compounds and amounts being selected such that the normalized polymerization activity of the catalyst composition at a temperature from 85 to 130 °C, is less than the normalized polymerization activity of the catalyst composition in the presence of only the SCA compound at the same total molar quantity of SCA at said temperature, and/or the normalized polymerization activity of the catalyst composition at a temperature from 85°C to 130 °C is less than the normalized polymerization activity of the same catalyst composition and the SCA/ALA mixture at a lesser temperature."

Claims 2-9 were directed to preferred embodiments of the catalyst of claim 1, whereby claim 6 had the following wording:

"A catalyst composition according to any one of the preceding claims, wherein the total molar quantity of the SCA mixture based on moles of transition metal is from 1 to 50."

Independent claim 10 was directed to a polymerisation process employing the catalyst composition of claim 1 and claims 11 and 12 were directed to preferred embodiments of said process.

III. A notice of opposition against the patent was filed, invoking the grounds pursuant to Article 100(a) EPC (lack of novelty, lack of inventive step), Article 100(b) EPC and Article 100(c) EPC.

The following documents, *inter alia*, were relied upon by the opponent:

D1: US-A-5 432 244 (not, as erroneously stated in the decision, "US-A-5 143 244")

D3: EP-A-560 035

D4: EP-A-453 116

D5: US-A-5 414 063

D6, D7: experimental reports.

IV. The decision was based on a set of amended claims as the main request, which set of claims differed from the claims as granted by amendment of the lower limit of the numerical range claim 6 such that the claim read as follows (difference in **bold**):

"A catalyst composition according to any one of the preceding claims, wherein the total molar quantity of the SCA mixture based on moles of transition metal is from 1.**0** to 50."

V. According to the decision:

- The amendment of the value "1" to "1.0" in claim 6 complied with the requirements of Rule 80 EPC;
- The requirements of Article 123(2) EPC were met. In claim 6 the feature "SCA mixture" was held to have a basis in the description of the application as filed, whereby there was no indication that only a single such agent was envisaged;

- The requirements of sufficiency of disclosure were satisfied because the technical features of operative claim 1 gave enough guidance to put the claimed invention into practice. No evidence had been provided to demonstrate that said technical definition was insufficient to solve the problem as set out in paragraph [0008] of the patent, or that the results reported in the examples of the patent could not in fact be attained. The functional feature of the claim was not to be read in isolation but in the context of the specific - defined - lists of SCA and ALA in the claim;
- The subject-matter was novel because a multiple selection would be necessary from D1 in order to generate the combination of features claimed;
- The requirements of inventive step were met. Document D3 was the closest state of the art. Although it did not relate to the same problem as the patent in suit, it had the most technical features in common. The subject-matter claimed was distinguished from the disclosure of D3 by the definition of the ALA. Experimental reports D6 and D7 demonstrated that the catalyst compositions of D3 complied with the functional features of claim 1. Thus the objective problem was the provision of an alternative catalyst composition having self-extinguishing properties. There was no reason to combine the teachings of D3 and D4 in order to solve said problem. Furthermore D4 did not disclose the ALA components of interest. Nor was any pertinent teaching provided by D5.

VI. The opponent (appellant) lodged an appeal against the decision.

Together with the statement of grounds of appeal, two further documents were submitted (designated D8 and D9 by the appellant and renumbered by the Board):

D9: WO-A-95/07943

D10: US-A-4 983 562.

VII. The patent proprietor (respondent) replied to the appeal.

The set of claims as upheld by the opposition division was maintained as the main request. Sets of claims forming auxiliary requests 1 to 11 were submitted. The wording of these requests is not of relevance to the decision.

VIII. The Board issued a summons to oral proceedings.

In a communication the Board set out its preliminary view.

It was noted that the appellant had not contested the findings of the opposition division in respect of inventive step but had instead formulated an entirely new attack relying on D9 and D10.

IX. By letter of 6 August 2020 the respondent made submissions in respect of the auxiliary requests.

X. With letter of 25 August 2020 the appellant made further submissions, *inter alia*, on the admittance of D9 and D10 to the proceedings. An attack on inventive

step relying on D3 and D4 was advanced.

- XI. With letter of 15 September the respondent made observations on the preliminary opinion of the Board and the latest submissions of the appellant. In particular the admittance of the new attack on inventive step was challenged.
- XII. Oral proceedings were held before the Board on 21 September 2020 with the respondent in attendance and the appellant participating via video link.
- XIII. The arguments of the appellant can be summarised as follows:
- (a) Admittance of D9 and D10

These documents had not been available, i.e. not in the possession of the appellant, during first instance proceedings. At that stage, the opponent had been satisfied that the attacks on novelty and inventive step were based on relevant and good documents and the preliminary opinion of the opposition division did not give any grounds to change this assessment or indicate the necessity for further documents. However the final decision came to a different conclusion. Additional searches had been carried out in order to find documents closer in terms of the problem to be solved which revealed D9 and D10.

The filing of new documents by a losing party to attempt to improve its position was a legitimate approach as held by T 927/04 of 10 May 2006, for example to provide evidence of a "missing link" in the prior art. The decision under appeal held that it was not obvious to combine D3 and D4. D9 was a

more relevant document and hence could serve to reinforce the arguments made, providing said "missing link". The respondent had had sufficient opportunity to consider this document as shown by the submission of a number of auxiliary requests to take account thereof. D9 and D10 disclosed all the features of the claim and were more relevant than any of the other documents on file. Hence they should be admitted.

(b) Allowability of amendments

The definition in claim 6 of "SCA mixture" had no basis in the application as originally filed. Even if various passages of the description indicated that more than one SCA could be present, this was in the context of a broad, generic group of SCAs. The operative claim was, as a result of amendments made during examination, directed to a much more tightly focused embodiment in which, as shown by the use of the wording "consisting of", a closed list of specific, individual SCAs was defined.

Differently from the disclosure of the ALAs, the corresponding passage of the application as originally filed relating to the closed group of SCAs did not include the wording "one or more", or "a mixture of" meaning that there was no disclosure of the possibility of members of this restricted group being present as mixtures. Even if the claim employed a "nested comprising" structure, this could not override the correct interpretation of the wording "selected from the group consisting of" as meaning that no further component beyond those explicitly mentioned could

be present, as set out for example in T 759/10 of 22 March 2012. A further defect with respect to Article 123(2) EPC was that the current wording of claim 6 linked the defined SCA compounds to the specific ALA compounds. There was no basis for such a combination in the application as originally filed.

The same situation applied to claims 7 and 8 in respect of the definition of mixtures of the ALA component.

(c) Sufficiency of disclosure

Contrary to what had been stated in the decision, it was not for the claims to provide the necessary technical guidance. Rather this was the purpose of the description. The claim relied on a combination of structural and functional features whereby the necessary result was to be achieved by selecting amounts of the SCA and ALA to get the required outcome. The patent contained only a very limited number of combinations of SCA and ALA and in limited amounts, in particular where the ALA was present in a large excess. The decision shifted the burden of trial and error testing of whether a given pair of ALA/SCA provided the required functional feature to third parties with no adequate guidance.

Furthermore the functional feature defined in the claim was exactly the same as the technical effect underlying the patent. Thus, according to the claim, the structural definitions of the SCAs/ALAs were in themselves not sufficient to solve the technical problem/satisfy the functional feature,

since for each given pair the necessary amounts would still have to be selected. This was an essential feature. As shown by examples 8b, 9b and 10b, activity at 100°C progressively increased as the molar ratio SCA/ALA increased. This series stopped at the ratio 30/70. However the trend indicated that it was possible that at significantly higher ratios, still within the claims, for example SCA/ALA 70/30 or higher the claimed effect on the activity at higher temperatures would not be attained. As such higher ratios had not been shown in the patent to be effective, there was no generalisable teaching in the patent extending over the whole scope of the claims.

The patent gave only very limited guidance, which was limited to the specific examples. Thus the claim covered a large unexplored area and there were strong doubts that the effect would be attained over the whole scope of the claim. Accordingly this was a reach-through claim situation as considered in T 1063/06 (OJ EPO 2009, 516), in which the combinations satisfying the functional features had to be determined by means of a screening. Due to the absence of adequate guidance provided by the patent, the skilled person thus faced an undue burden in operating the invention over the whole scope of the claims. In this connection reference was also made to T 339/05 of 10 April 2008.

Whilst it was the task of the opponent to demonstrate, by verifiable facts, that there was insufficiency of disclosure (T 19/90, OJ EPO 1990, 476), in the situation where a patent relied on

functional features, the description had to satisfy certain requirements. Such a definition would be acceptable if all possible combinations covered by the claim would result in the required effect. However in the present case the structural features relating to the amounts of the SCA/ALA would only fall within the scope of the claims if the functional features were satisfied. In this connection reference was made to decision T 1051/09 of 7 February 2012 relating to the situation where there was a lack of a generalisable teaching going beyond the specific examples.

(d) Novelty

All features of the claim were disclosed in D1, including a combination of a mixture of SCAs, which in the case of D1 corresponded to a mixture of silicon compounds and mono- or polycarboxylic acid esters. The specified ratios of SCA/Ti and of the ester and silicon compound were derivable from the composition data given in the table in column 2 of D1. D1 specifically mentioned members of the various catalyst constituents falling within the definition of the claim meaning that claim 1 did not meet the selection criteria, in particular the requirement that the selected range should be far removed from the examples of D1. Specifically according to the operative claim there were examples of internal donors (phthalates), SCA and ALA (ethyl acetate) which did not allow the claimed subject-matter to be far removed from the disclosure of D1.

Lack of novelty also existed with respect to D9.

(e) Inventive step

As stated in the decision, D3 was the closest prior art. Even if the problem defined in D3 was not the same as that in the patent there was a strong similarity, if not identity, in terms of the sought technical effects. The patent addressed the problem of reduced polymer agglomerate formation and improved process control whilst D3 was directed to avoiding fouling of the reactor and/or clogging of pipes of the reactor. Thus both the patent and D3 aimed at the same effect. Even if this effect was considered in the patent and D3 to be the result of different mechanisms, it nevertheless had its origin in the same or similar class of compounds (ALA). The skilled person seeking to reduce polymer agglomeration would consult D3 as a starting point. It would be realised that certain compounds, structurally very similar to those of the patent, affected catalyst activity and were effective in reducing reactor fouling or clogging. Since D3 disclosed the possibility of selectivity based on particle size but was silent on any other mechanism there would be no grounds for the skilled person to conclude that a temperature based mechanism would not operate in combination with the particle size. Consequently D3 would be considered as closest prior art. Experimental reports D6 and D7 showed that the catalyst compositions of D3, employing glycerol monostearate or sorbitan monooleate as ALA exhibited the required self-extinguishing properties.

No technical effect had been shown to arise from the presently defined ALAs compared to those of D3. Thus the objective technical problem was to provide

alternative self-extinguishing catalyst compositions. The claimed solution was rendered obvious by D9, which was directed to the same problem as D3. Since the compounds of D3 had been shown to be effective as ALAs the skilled person would expect also the reducing agents of D9, such as ethyl acetate, to provide the same effects in terms of self-extinguishing properties and reduction of reactor fouling.

Alternatively, as submitted for the first time in the appeal proceedings with the letter of 25 August 2020, the skilled person would also have considered the combination of D3 and D4, which attack had already been advanced during the opposition proceedings.

XIV. The arguments of the respondent can be summarised as follows:

(a) Admittance of D9 and D10

Before the first instance, the appellant had based its attack on other documents. This did not mean that D9 and D10 had not been available and no evidence to this effect had been provided. Instead, as confirmed by the statements made by the appellant in particular at the oral proceedings, an active decision had been made to restrict the case during opposition proceedings to the documents then cited. Consequently D9 and D10 had to be regarded as late filed and should not be admitted. Furthermore D9 could not be seen as providing a "missing link" overcoming a deficiency in the inventive step attack raised in the first instance proceedings because it did not disclose the self-

extinguishing properties of catalyst systems. Nor had it been shown that D9 and D10 were of high relevance in any other respect. On the contrary, D9 addressed a different problem to that of the patent, namely that of the presence of catalyst fines in the recycle line and for this reason could not be considered to be *prima facie* relevant.

(b) Allowability of amendments

The subject matter of claim 6 was disclosed at page 8, lines 31-33 of the application as filed. The objection relating to the SCA compounds in claim 1 being in the form of a closed list was without merit. The catalyst was defined employing "nested comprising" language which permitted that more than one SCA be present as acknowledged in the decision. The objection that the term "SCA mixture" of claim 6 implied non-disclosed combinations of the explicitly listed SCAs was similarly incorrect. The claim specified that an SCA selected from a list of 18 be present. However the use of "comprising" in the preamble of the claim meant that any other SCA could also be present. The identity of these additional SCAs was not restricted in any way by the wording of claim 1. Thus the feature "SCA mixture" in claim 6 did not relate to a newly created combination of two or more of the 18 SCAs listed in claim 1.

For analogous reasons the definition of mixtures of ALA components in claims 7 and 8 was not objectionable.

(c) Sufficiency of disclosure

The appellant had advanced no evidence to support its arguments in respect of there being an undue burden in operating the invention over the whole scope of the claims, contrary to what was required according to the cited T 19/90. In this connection the findings of T 182/89 (OJ EPO 1991, 391) could also be invoked. It was also the case that no trial and error was required since the patent provided all the necessary information (with reference to T 339/05). The invoked T 1051/09 concerned the situation where the claims relied on a functional definition without any guidance. This was not the situation in the present case and no evidence had been provided to the contrary. Regarding the objection invoking examples 8-10 of the patent, the data of the patent did not allow the conclusion indicated by the appellant to be reached, and similarly no data had been advanced to support the position of the appellant.

(d) Novelty

D1 did not disclose the specific SCA/ALA mixtures in combination with a Ziegler-Natta procatalyst composition. On the contrary, as stated in the decision, a plurality of selections from several lists would be required to assemble the necessary combination of features, some of which selections would disregard the teachings of D1.

Regarding D9 and D10, to the extent that these were to be admitted, D9 related to compositions to "kill" catalysts, not to provide a catalyst system

having self-extinguishing properties.

(e) Inventive step

The appellant had not challenged with the statement of grounds of appeal the findings of the opposition division that the claimed subject-matter was inventive with respect to the disclosure of D3 in combination with D4 or D5. The new attack based on D3 and D9 should not be admitted. In any case it did not lead to the conclusion urged by the appellant.

D3 did not address the problem underlying the patent in suit, namely that of providing catalyst systems having self-extinguishing properties. Instead D3 addressed the problem of selectively inhibiting the reactivity of polymer particle fines compared with that of polymer particles of average size present in the gas phase. There was no indication in D3 that the compositions thereof would provide any benefit in terms of reducing polymerisation activity at the temperature range specified in claim 1 of the patent in suit. Experimental reports D6 and D7 were irrelevant since the results shown therein were not disclosed in D3 and would not have been evident to the skilled person.

It was not the case that the skilled person, starting from D3, would consult D9 and realise that the reducing agents thereof could be used as alternatives to compound (3) because D3 did not address the same problem as the patent in suit and there would have been no incentive to consult D9 in view of solving the problem underlying the patent

in suit. Even if D9 had been consulted and it had been decided to replace compound (3) with one of the reducing agents disclosed in D9, there would have been no reason to choose any of these in preference to any of the others disclosed in D9.

The attack on inventive step based on D3 in combination with D4 had not been raised in the statement of grounds of appeal and was consequently late filed. No justification for the amendment to the case represented by submission of this attack had been advanced. Nor had it been shown that there were any "exceptional circumstances" which would justify advancing such an attack (with reference to Article 13(2) RPBA 2020). It should not be admitted. In any case this combination of documents also did not render the claimed subject matter obvious.

- XV. The appellant requested that the decision under appeal be set aside and that the patent be revoked.

- XVI. The respondent requested that the appeal be dismissed (main request). In the alternative maintenance of the patent on the basis of one of the sets of claims according to auxiliary request 1 to auxiliary request 11, submitted with the rejoinder to the statement of grounds of appeal was requested.

Reasons for the Decision

1. Admittance of late filed facts and objections

1.1 D9 and D10

The arguments advanced as justification for D9 and D10 show that the purpose of citing these was not to demonstrate that the decision of the opposition division, taken on the basis of the documents provided, was incorrect. Rather these documents formed the basis for entirely new objections of lack of novelty and lack of inventive step, advanced for the first time at the outset of the appeal proceedings. Therefore the argument of the appellant that the purpose of citing these documents was to provide a form of "missing link" in the arguments is not convincing.

The submissions of the appellant, in particular those made at the oral proceedings, confirm that it was not the case that D9 and D10 had been unavailable at the time of filing the opposition, but that it had been decided to rely on other documents.

It is thus apparent that the citing of D9 and D10 was occasioned by the failure of the case presented by the appellant before the opposition division, on the basis of the documents cited, and the attempt to present a different and - hopefully - stronger case before the Board.

The Board therefore comes to the conclusion that, if the appellant intended to rely on such additional documents to defend its case and raise additional objections, the documents should have been filed before the opposition division.

On this basis pursuant to Article 12(4) RPBA 2007, which is the applicable law in this case (see Article 25(2) RPBA 2020), the Board considers it appropriate to exercise its discretion not to admit D9 and D10 to the procedure.

- 1.2 In the letter of 25 August 2020 the appellant attacked inventive step on the basis of a combination of D3 and D4. This attack had been advanced in the notice of opposition (page 7, last two paragraphs) and was pursued at the oral proceedings before the opposition division (minutes, paragraph 8.2; Reasons for the Decision, section 4, page 8 second-fifth paragraphs). However this objection was not invoked in the statement of grounds of appeal. Indeed, D4 was not invoked in any manner in the submissions on inventive step.

Raising this objection therefore constitutes an amendment to the appellant's case, made after issue of the summons to the oral proceedings on 15 January 2020. This is after entry into force of RPBA 2020, meaning that pursuant to Article 25(1) and (3) RPBA 2020, Article 13(2) RPBA 2020 applies.

It has not been shown, nor even been argued that there are any exceptional circumstances which would occasion or justify the new - in the appeal proceedings - attack on inventive step.

Accordingly pursuant to Article 13(2) RPBA 2020 the amendment to the appellant's case represented by the new attack on inventive step is not taken into account.

2. Main request

2.1 Article 123(2) EPC

The objection of the appellant relates to the specification in claim 6 of "SCA mixture".

This feature is to be found in the application as originally filed at page 8, lines 31-33 together with the molar ratio as specified in the claim.

The appellant argues in effect that the wording of claim 1 excludes mixtures of SCAs and that claim 6 thus constitutes an unallowable amendment.

Claim 1 - which is unamended compared to the granted claim - employs what can be called "nested comprising" language in that the catalyst composition is defined as "comprising" certain compositions which themselves are defined as "comprising" further components. This imposes no limitation on any particular numbers of different components of a given category. This is also confirmed by decision T 759/10, relied upon by the appellant, with reference to the therein cited T 472/88 of 10 October 1990.

Regarding the question of whether the formulation "a selectivity control agent [....] selected from the group consisting of" necessarily and exclusively defines a single such agent, i.e. a particular compound, or whether this wording is to be interpreted as indicating a particular function without imposing any limit on the number of components performing this function, the Board considers that in view of the "nested comprising" language in the preamble of the claim there is no such limitation. Following the

findings of T 472/88 in section 3 of the Reasons this wording is to be understood as requiring that the SCA be mandatorily at least one of those explicitly named, but that the presence of any other compounds performing this function, whether those of the list or others, is not excluded. In any case the original description - page 8 lines 31-33 - explicitly discloses the presence of mixtures of SCAs with no limitation to any specific members of this class of compound.

The indicated wording of dependent claim 6 therefore does not give rise to added subject-matter.

Regarding claims 7 and 8 and the feature "ALA mixture", claim 1 as originally filed specifies "one or more activity limiting agent (ALA)" in the context of a generic definition of the possible compounds. The same wording is to be found at page 3, line 15 of the application as filed. The specific embodiments of ALAs defined in claim 1 are to be found at page 8, lines 14-17 and claim 8 of the application as originally filed both of which disclose "mixtures thereof".

Thus the subject-matter of claims 7 and 8 finds a basis in the application as originally filed.

The requirements of Article 123(2) EPC are satisfied.

2.2 Sufficiency of disclosure

The appellant has advanced no evidence to support its objections in respect of sufficiency of disclosure.

The results reported in examples 8-10 also do not demonstrate any lack of sufficiency of disclosure, contrary to the arguments of the appellant. These show

that as the ratio of SCA/ALA is modified from 10/90 to 30/70 the degree of reduction in activity as temperature is increased decreases, in particular between 10/90 and 20/80. What happens beyond the ratio of 30/70 is however not reported in the patent and is therefore unknown. However this lack of information does not lead inevitably and necessarily to the conclusion, as urged by the appellant, that the required effect of activity reduction would not occur, and once again, no evidence has been advanced to support this contention.

It is established case law, in particular from the two decisions invoked by the parties that it is the burden of the opponent to demonstrate by evidence that an insufficiency of disclosure exists (T 182/99, Headnote I), by providing verifiable facts (T 19/90, section 3.3 of the reasons).

Decision T 1051/09, which was invoked by the appellant in the letter of 25 August 2020, concerned the situation where there was a lack of a generalisable teaching applicable beyond the specific examples which was confirmed by the evidence of the patent itself (Reasons section 2.2-2.6). However the situation considered in this decision is fundamentally different from that of the present case where, as noted, there is no evidence either in the patent or provided by either of the parties to support the contention of the appellant.

T 339/05 relates to a situation where there was no hint how to identify or select compounds meeting the (functional) requirements of the claim beyond those explicitly recited whereby the patent itself proved that a number of candidate compounds did not meet these

functional requirements (Reasons, 3.4). Again this does not apply to the present case since, it is reiterated, no evidence to support the position of the appellant has been advanced.

There is also no evidence to support the contention, with reference to T 1063/06, reported above in section XIII.(c), third paragraph, that the claims are of the "reach-through" type i.e. that the claims were directed to inventions going beyond the contribution to the art made by the patent.

Due to the lack of any supporting evidence, the submissions in respect of sufficiency of disclosure can be accorded the status only of unsupported allegations.

The case of lack of sufficiency of disclosure is consequently not proven.

2.3 Novelty

D1 discloses, separately, the various features of the claim:

- Ziegler-Natta catalyst composition containing transition metal (Ti) and Mg (column 2, line 10 to column 3, line 26);
- Esters of monocarboxylic or polycarboxylic acids, (column 1, line 66; column 3, lines 27 to column 4, line 2). These compounds can serve as internal electron donor - designated in D1 as "inside electron donor" - or as selectivity control agent (defined as "outside electron donor" column 3, line 29-30). Chemically these correspond to the components identified as "ALA" in the operative claim;

- Alkyl aluminium compound as cocatalyst whereby various radicals are discussed (column 1, line 67; column 4, lines 3-34);
- According to column 4, lines 36-56 as other selectivity control agents in addition to or instead of the mono- or polycarboxylic acid ester, silicon compounds with at least one Si-O-C linkage, e.g. diphenyldimethoxysilane can be present. As explained by the appellant in the second and third paragraphs of the discussion of novelty in the statement of grounds of appeal, the ratio SCA/Ti is derivable from the composition data given in the table in column 2..

Thus all the structural features of claim 1 are disclosed individually in D1 or derivable from the disclosure thereof. However it has not been shown where there is an explicit or implicit disclosure of the required combination thereof as defined by operative claim 1.

The appellant has argued (statement of grounds of appeal, page 5, first complete paragraph) that the requirements of selection inventions are not met because the selected range is not far removed from the examples of D1.

This objection however invokes considerations underlying the case law developed for addressing the question of novelty of numeric ranges as considered, for example in the decisions T 198/84 (OJ EPO 1985, 209) and T 279/89 of 3 July 1991. In this respect reference is made to the discussion of such issues in the publication "Case Law of the Boards of Appeal of the European Patent Office", ninth Edition, 2019, section I.C.6.3.

However the matter at issue in the present case is that of making a selection from a plurality of lists as represented by the various parts of D1 invoked. For a discussion of the case law developed in this respect see, *ibid.* section I.C.6.2, for example with reference to T 12/81 (OJ EPO 1982, 296), which held that combinations requiring selections from two lists of some length could be regarded as novel.

As follows from the foregoing analysis of the disclosure of D1, selections from a number of lists would be required to arrive at the subject-matter of operative claim 1.

It has not been shown that D1 provides an explicit or implicit disclosure of, or a pointer to, the selections or combination of features necessary to arrive at the subject-matter of claim 1.

Novelty is therefore acknowledged.

2.4 Inventive step

2.4.1 The decision under appeal held D3 to represent the closest state of the art and found that the subject-matter claimed was inventive with respect thereto, possibly in combination with D4 and D5.

In the statement of grounds of appeal the appellant did not challenge the findings of the decision.

The appellant instead formulated exclusively a new attack relying on D9 as the combination document. However as explained above, D9 is not admitted to the proceedings.

Similarly the newly formulated objection relying again on D3 and D4 is likewise not admitted to the proceedings.

The consequence is that there are no objections relying on admitted documents or admitted in the proceedings which would give the Board grounds to diverge from the findings of the decision under appeal on inventive step.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



B. ter Heijden

D. Semino

Decision electronically authenticated