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# Datasheet for the decision of 4 May 2021

Case Number: T 1659/19 - 3.3.06

09773001.4 Application Number:

Publication Number: 2313481

IPC: C10L1/223, C10L1/23, C10L10/10

Language of the proceedings: ΕN

#### Title of invention:

Production process of unleaded high octane number gasoline, and so obtained gasolines

### Applicant:

CHIMEC S.P.A.

#### Headword:

High octane number gasoline / CHIMEC

#### Relevant legal provisions:

RPBA 2020 Art. 13(1), 13(2), 25(1) EPC Art. 84, 123(2)

#### Keyword:

Admittance of the main request and of the first and second auxiliary requests - (no) - not prima facie allowable

Admittance of the third and fourth auxiliary requests - (no) - no exceptional circumstances justified with cogent reasons

Filing of an additional request during oral proceedings after having received the conclusion of the board on the pending requests (no) - no exceptional circumstances justified with cogent reasons

#### Decisions cited:

T 0989/15, T 0752/16, T 2214/15

#### Catchword:



# Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 1659/19 - 3.3.06

DECISION
of Technical Board of Appeal 3.3.06
of 4 May 2021

Appellant: CHIMEC S.P.A.

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I-00144 Roma RM (IT)

Representative: Germinario, Claudio

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Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 22 November 2018 refusing European patent application No. 09773001.4 pursuant to Article 97(2) EPC.

#### Composition of the Board:

Chairwoman J. Hoppe Members: L. Li Voti

S. Arrojo

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## Summary of Facts and Submissions

- I. The applicant's appeal lies from the decision of the Examining Division to refuse European patent application no. 09 773 001.4.
- II. With its statement of grounds, the appellant filed three sets of amended claims as main request and first and second auxiliary request as well as annexes 1 to 8.
- III. With the communication under Article 15(1) RPBA dated 30 November 2020, the board expressed its preliminary opinion that the requests did not seem to be allowable on the grounds of lack of clarity (Article 84 EPC), added subject-matter (Article 123(2) EPC) and lack of an inventive step (Article 56 EPC).
- IV. Following this communication, the appellant filed by letter dated 25 March 2021 three sets of amended claims as main request and first and second auxiliary request. With a letter dated 21 April 2021, the appellant filed an amended version of the first auxiliary request and, with a further letter dated 26 April 2021, new third and fourth auxiliary requests.
- V. Oral proceedings were held before the board on 4 May 2021.

The appellant finally requested that the decision under appeal be set aside and that the patent be granted on the basis of the claims according to the main request, filed with letter of 25 March 2021, or as an auxiliary measure, on the basis of the first auxiliary request,

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filed with letter of 21 April 2021 or on the basis of the second auxiliary request, filed with the letter of 25 March 2021 or on the basis of the third or fourth auxiliary request, both filed with letter of 26 April 2021.

## VI. Claim 1 of the main request reads as follows:

"1. A production process of an "unleaded"-type gasoline or gasoline blend of the type intended to be used in motor drives managed by an electronic system, Euro III, Euro IV and Euro V, having a Research Octane Number (RON) greater than 95 to 105, having the following formula:

Sulphur content: 0 - 10 mg/kg Oxidation stability (EN ISO 7536): 360 - 580 min Existent gum content (EN ISO 6246): 1 - 5 mg/kg Aromatic hydrocarbon content: 5-35 % (v/v)Olefinic hydrocarbon content: 0 - 18 % (v/v)Benzene content: 0.1 - 1 % (v/v)Oxygen content: 0.01 - 3.5 % (v/v)Methanol content: 0 - 3 % (v/v)Ethanol content: 0 - 5% (v/v)Iso-propyl alcohol content: 0 - 10 % (v/v)Isobutyl alcohol content: 0 - 10 % (v/v)Ter-butyl alcohol content 0 - 7 % (v/v)5+ C atom ether content: 0 - 15 % (v/v); Other oxygenated compound content: 0 - 10 % (v/v); and maximum vapor pressure equal to 1 Bar as measured according to method EN 13016-1, wherein: the process is a refinery process, operated under severity conditions such as to result in a product having a low octane value (RON) of 95 or lower, such

product is requalified by addition of an aromatic

amine-based additive, as principal and autonomous ON booster, in an amount comprised between 0.1 % and 3 %  $^{\circ}$ 

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(v/v), until obtaining the preset Octane Number, wherein the aromatic amine is selected from the group: N-methylaniline; ortho-toluidine; ortho-ethylaniline; N-methyl-orthotoluidine; 2,4-dimethylaniline; 2,3-dimethylaniline; 2,5-dimethylaniline; 2,6-dimethylaniline; N-methyl-2,4-dimethylaniline; N-methyl-2,3-dimethylaniline; N-methyl-2,6-dimethylaniline, N-ethyl-aniline, N-phenyl-aniline, N-propyl-aniline, N-isopropyl-aniline, N-isobutyl-aniline, N-ter-butyl-aniline, N-isoamyl-aniline, and any possible mixture thereof."

Claim 1 according to the **first auxiliary request** has the following wording:

"1. An "unleaded-type" gasoline, or gasoline blend, of the type intended to be used in motor drives managed by an electronic system, Euro III, Euro IV and Euro V, containing an aromatic amine as principal and autonomous ON booster in an amount comprised between 0.1 % and 3 % (v/v), having a Research Octane Number (RON) greater than 95 to 105, having the following formula:

Sulphur content: 0 - 10 mg/kg

Oxidation stability (EN ISO 7536): 360 - 580 min

Existent gum content (EN ISO 6246): 1- 5 mg/kg

Aromatic hydrocarbon content: 5 - 35 % (v/v)

Olefinic hydrocarbon content: 0 - 18 % (v/v)

Benzene content: 0.1 - 1 % (v/v)

Oxygen content: 0.01 - 3.5 % (v/v)

Methanol content: 0 - 3 % (v/v)

Ethanol content: 0 - 5% (v/v)

Iso-propyl alcohol content: 0 - 10 % (v/v)

Isobutyl alcohol content: 0 - 10 % (v/v)

Ter-butyl alcohol content: 0 - 7 % (v/v)

5+ C atom ether content: 0 - 15 % (v/v);

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Other oxygenated compound content: 0 - 10 % (v/v);

obtainable through a refinery process, operated under severity conditions such as to result in a product having a low octane value (ON) of 95 or lower, wherein such product is requalified by addition of the aromatic amine (v/v), until obtaining the preset Octane Number, wherein the aromatic amine is selected from the group: N-methylaniline; orthotoluidine; ortho-ethylaniline; N-methyl-orthotoluidine; 2,4-dimethylaniline; 2,3-dimethylaniline; 2,5-dimethylaniline; 2,6-dimethylaniline; N-methyl-2,4-dimethylaniline; N-methyl-2,3-dimethylaniline; N-methyl-2,6-dimethylaniline, N-ethyl-aniline, N-phenyl-aniline, N-propyl-aniline, N-isopropyl-aniline, N-isobutyl-aniline, N-ter-butyl-aniline, N-isoamyl-aniline, and any possible mixture thereof."

Claim 1 according to the **second auxiliary request** differs from that according to the first auxiliary request insofar as it contains the following amended wording (amendments highlighted by the board):

"... containing the an aromatic amine, as principal and autonomous ON booster, in an amount comprised between 0.1 % and 3 % (v/v), having a Research Octane Number RON 90-95, before addition of the aromatic amine and greater than 95 to 105, after addition of the aromatic amine and the corresponding MON in the range 80-95; having the following formula:..."

Claim 1 according to the **third auxiliary request** differs from that according to the first auxiliary request insofar as it contains the following amended wording:

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"...wherein the aromatic amine is selected from the group: N-methylaniline; orthotoluidine; orthotoluidine; 2,4-dimethylaniline; 2,3-dimethylaniline; 2,5-dimethylaniline; 2,6-dimethylaniline; N-methyl-2,4-dimethylaniline; N-methyl-2,3-dimethylaniline; N-methyl-2,4-dimethylaniline; N-methyl-2,3-dimethylaniline; N-methyl-2,6-dimethylaniline, N-ethyl-aniline, N-phenyl-aniline, N-propyl-aniline, N-isopropylaniline, N-isobutyl-aniline, N-ter-butyl-aniline, N-isoamyl-aniline, N-Nitrosodiphenylamine, N,N-Diethyl-p-phenylendiamine and any possible mixture thereof and any possible mixture thereof and wherein the main components used in this gasoline are the following: Butane gases mainly containing hydrocarbons having 4 C atoms;

Light straight-run gasoline;

C5 isomerate

C6 isomerate

Reformed gasoline with a different degree of severity in connection with features the end gasoline shall have:

Gasoline from alkylation process;
Light gasoline from cracking process;
Oxygenated compounds introduced or produced in the same refinery."

Claim 1 according to the **fourth auxiliary request** differs from that according to the first auxiliary request insofar as the list of aromatic amines is amended as follows:

"...wherein the aromatic amine is selected from the group: 2-fluoroaniline, 2-chloroaniline, N-methylaniline; ortho-toluidine; ortho-ethylaniline; N-methyl-orthotoluidine; 2,4-dimethylaniline; 2,3-dimethylaniline; 2,6-

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dimethylaniline; N-methyl-2,4-dimethylaniline; N-methyl-2,3-dimethylaniline; N-methyl-2,6dimethylaniline, N-ethyl-aniline, N-phenyl-aniline, Npropylaniline, N-isopropyl-aniline, N-isobutyl-aniline,
N-ter-butylaniline, N-isoamyl-aniline, 2-methyl-3fluoroaniline, 2-fluoro-3-methylaniline, 2-methyl-4fluoroaniline, 2-fluoro-4-methylaniline, 2,5dimethyl-3-fluoroaniline, 2,5-dimethyl-4-fluoroaniline,
2,3-dimethyl-6-fluoroaniline, 2-fluoro-3-ethylaniline,
2-ethyl-4-fluoroaniline, 2-methyl-5-ethyl-4fluoroaniline, 2-fluoro-6-isopropyl-aniline, 2isopropyl-3-fluoro-5-ethyl-aniline, 2,6-di-ter-butyl-4fluoroaniline, N-Nitrosodiphenylamine, and any possible
mixture thereof."

#### Reasons for the Decision

Admittance of the main request and the first and second auxiliary requests under Article 13(1), (2) RPBA 2020

1. The appellant filed by letter dated 25 March 2021 three sets of amended claims as main request and first and second auxiliary requests. Moreover, it filed with a further letter dated 21 April 2021 an amended version of the first auxiliary request wherein it corrected an obvious mistake in a dependent claim of the former auxiliary request 1.

All these requests amount to an amendment of the appellant's case and, having been filed after the summons to oral proceedings of 20 July 2020, may be admitted into the proceedings at the board's discretion to be exercised in accordance with the provisions of Article 13(2) and Article 25(1) RPBA 2020.

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Article 13(2) RPBA 2020 requires that any amendment to a party's appeal case made after notification of a summons to oral proceedings shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.

- 1.1 In its communication pursuant to Article 15(1) RPBA (points 3.2 and 6.2) the board had communicated its provisional opinion that claim 1 of the then pending requests inter alia lacked clarity under Article 84 EPC insofar as it contained the undetermined wordings "low octane value" and "low severity conditions". In this respect, the board did not follow the decision under appeal that considered the wording "low octane value" to be clear and that the wording "low severity conditions" had to be interpreted broadly and in a consistent way with the interpretation of the wording "low octane value".
- 1.2 In order to deal inter alia with the new objections of the board, the appellant filed a new main request and first and second auxiliary requests with letter of 25 March 2021. According to the established case law of the boards of appeal, amending a party's case at a late stage in the proceedings can be justifiable if it is an appropriate and immediate reaction to unforeseeable developments in the proceedings which do not lie in the responsibility of the party submitting the amendment (see Case Law of the Boards of Appeal, 9th edition 2019, V.A.4.4.2a, first full paragraph). Thus, in the case on file, the board accepts that there existed exceptional circumstances that could in principle have justified the filing of a new request at this stage of the proceedings. This applies also to the amended version of the first auxiliary request filed by letter

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of 21 April 2020, wherein only a mistake ("process" instead of "gasoline, or gasoline blend") present in a dependent claim of the previous version was corrected in order to align it to the independent product claim 1.

- 1.3 However, a request filed after the summons to oral proceedings should not be assessed under less strict criteria than a request that had been filed at an earlier stage of the proceedings. Thus, when assessing the admittance of a request filed after notification of the summons to oral proceedings the criteria as set out in Article 13(1) RPBA 2020 do also apply (see for example T 0752/16, point 3.2 of the reasons and T 0989/15, catchword). Article 13(1) RPBA 2020 provides that the board shall exercise its discretion for admitting any amendment to a party's appeal case after it has filed its grounds of appeal in view of, inter alia, procedural economy and the suitability of the amendment to prima facie resolve the issues which were raised by the board without giving rise to new objections.
- 1.4 In the board's view, the amended wording of claim 1 of the main request does not prima facie overcome the deficiencies indicated by the board in its communication with respect to the unclear wordings "low octane value" and "low severity conditions" and gives rise to new objections under Articles 84 and 123(2) EPC.
- 1.4.1 In fact, the amended wording of claim 1 of the new main request requires that the process "is a refinery process, operated under severity conditions such as to result in a product having a low octane value (RON) of 95 or lower" which is then requalified by addition of

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the aromatic amine-based additive in an amount comprised between 0.1 % and 3 % (v/v), until obtaining the preset Octane Number, i.e. greater than 95 to 105.

Amended claim 1 thus does not yet specify the lower limit of the "low octane value" characteristic which remains undetermined. Moreover, it is directly apparent from the amended wording that the claimed process encompasses the operation of a plant under generic severity conditions that result in a product having any possible low octane value which is then requalified by adding the amine booster to a final RON value which can also be of 105, which combination of initial and final RON values is not directly and unambiguously supported by the original disclosure, especially in combination with the specific gasoline composition of claim 1.

- 1.4.2 Moreover, as it was explained in the board's communication, the original application only disclosed (page 9, lines 5-8) to operate the process under "low severity conditions", for example in terms of exhausted catalysts or lower temperatures. Therefore, the original disclosure did not contain any disclosure of operating the process under undetermined generic "severity conditions" as in the amended claim, which generic "severity conditions" cannot be considered to be identical to the unclear "low severity conditions" of the original disclosure.
- 1.5 Since already these amendments do not overcome the objections raised in the board's communication and give rise to new objections under Articles 84 and 123(2) EPC, there is no need to discuss in this decision all the other deficiencies identified by the board and communicated to the appellant during oral proceedings.

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- 1.6 Therefore, the board concluded that the main request was not prima facie allowable and did not admit it into the proceedings.
- Claim 1 of the first auxiliary request is directed to a gasoline having the same RON values and composition of that of the process of claim 1 according to the main request but not containing any longer any explicit limit for its vapour pressure. The claimed gasoline is moreover characterized by the same process features of claim 1 according to the main request discussed above, namely being obtainable through a refinery process, operated under severity conditions such as to result in a product having a low octane value (RON) of 95 or lower which is then requalified by addition of the aromatic amine-based additive in an amount comprised between 0.1 % and 3 % (v/v), until obtaining the preset Octane Number, i.e. greater than 95 to 105.
- 2.1 Therefore, this product claim is characterized by process features which contain prima facie the same deficiencies identified above with respect to the main request.
  - Additionally, the deletion of the vapour pressure limit contained in claim 1 of the main request also gives rise to a new objection under Article 123(2) EPC, because original claim 12, which is the support for the claimed gasoline composition, is dependent on original claim 8, reading "...and having low vapour pressure...", thus requiring a limit for the vapour pressure.
- 2.2 Therefore, the board decided that also the first auxiliary request was not prima facie allowable and did not admit it into the proceedings.

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- 3. Claim 1 of the **second auxiliary request** differs from claim 1 of the first auxiliary request insofar as it specifies that the gasoline has a RON of 90-95, before addition of the aromatic amine and greater than 95 to 105, after addition of the aromatic amine.
- 3.1 This claim thus implicitly limits the originally claimed "low octane value" to the range of 90 to 95 RON but still requires that the process characterizing the claimed gasoline is carried out under generic undetermined "severity conditions" which cannot be considered to be identical to the originally disclosed "low severity conditions".
- 3.1.1 Moreover, the amended claim gives rise prima facie to a new objection under Article 123(2) EPC, because a gasoline of the given formula having initially a RON of 90 before addition of the amine additive and of 105 after addition of the amine additive is not directly and unambiguously derivable from the original application.

In fact, original claim 12 discloses only a <a href="mailto:supplemented">supplemented</a> gasoline having a RON of 90 to 105 and not an <a href="mailto:initial">initial</a> RON of 90. Furthermore, the similar compositions disclosed on page 13, line 19 ff. and page 19, line 9 ff. of the original disclosure may have an initial RON of 90 but do not disclose the final RON.

3.1.2 Furthermore, the claimed gasoline, in contrast with that which was originally disclosed, has no vapour pressure limit, which gives rise to additional Article 123(2) objections.

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3.2 Since the amended claim still contains part of the deficiencies identified above and gives rise to new ones, the board decided not to admit the second auxiliary request into the proceedings.

Admittance of the third and fourth auxiliary requests under Article 13(2) RPBA 2020.

- 4. The appellant filed with a letter dated 26 April 2021, about 10 days before the oral proceedings, the **third**and fourth auxiliary requests, which are similar to the first auxiliary requests but contain inter alia amendments to the list of aromatic amine boosters. As stated by the appellant in its letter and repeated during oral proceedings, these very late filed requests had been filed in order to meet objections under Article 123(2) EPC that the board could possibly raise during oral proceedings with regard to the amine boosters list.
- 4.1 Since these requests only address hypothetical objections, there is no reason which would justify not having submitted them earlier. Thus, there are no exceptional circumstances justifying their filing at such a late stage of the proceedings.

Therefore, the board exercised its discretion not to admit these very late filed requests under Article 13(2) RPBA 2020, so that they are not to be taken into account.

Admittance of a further request during oral proceedings

5. During oral proceedings and after the board had decided not to admit all the pending requests, the appellant requested an interruption in order to prepare and

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submit an additional request, but nonetheless indicated that it would refrain from doing so if the board considered that there were no exceptional circumstances under Article 13(2) RPBA 2020 that could justify this late submission.

- In the appellant's view, cogent reasons justifying exceptional circumstances had to be seen in the fact that the examining division had refused the application for lack of inventive step whilst the board in its communication under Article 15(1) RPBA reintroduced objections under Article 84 EPC which had been dropped by the examining division and had raised new objections under Articles 84 and 123(2) EPC. Thus, it needed to be given the opportunity to amend its request in order to meet the requirements of Articles 84 and 123(2) EPC.
- These arguments are however not suitable for justifying the filing of a new request for the first time at the oral proceedings, because the appellant was aware of the board's objections since it received the preliminary opinion of the board and already filed auxiliary requests in writing for addressing the board's objections.

Moreover, the appellant should have expected that, for the sake of procedural economy, late filed requests would not be admitted if they did not prima facie overcome the issues raised by the board or gave rise to new objections. There is also no reason, again for the sake of procedural economy, to assume that the appellant's right to react to the board's objections implies that the appellant should be offered an indefinite number of opportunities to reach a version which is found acceptable by the board (see also T 2214/15, reasons 5.4).

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- 5.3 After the board concluded that there were no exceptional circumstances justified by cogent reasons as required by Article 13(2) RPBA 2020 for filing an additional request at such a late stage of the proceedings, the appellant merely confirmed its initial requests and thus refrained from filing a further request.
- 6. As none of the appellant's final requests was admitted into the proceedings, the appeal had to be dismissed.

#### Order

# For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairwoman:



A. Pinna J. Hoppe

Decision electronically authenticated