

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 16 June 2020**

Case Number: T 1255/18 - 3.3.03

Application Number: 12003913.6

Publication Number: 2500377

IPC: C08K3/22, C08K3/34, C08K9/04,
C09D5/08, C09D7/12

Language of the proceedings: EN

Title of invention:

Coating compositions exhibiting corrosion resistance properties, related coated substrates, and methods

Applicant:

PPG Industries Ohio, Inc.

Relevant legal provisions:

EPC Art. 76(1), 123(2)
RPBA 2020 Art. 13(2)

Keyword:

Divisional application - subject matter extends beyond the content of the earlier application (yes) (all requests)
Auxiliary requests 4 to 7 submitted after notification of the summons to oral proceedings - admitted into the proceedings (yes) - exceptional circumstances

Decisions cited:

G 0001/93, G 0001/03, G 0001/05, G 0001/06, G 0002/10,
T 0012/81, T 0783/09



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1255/18 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 16 June 2020

Appellant: PPG Industries Ohio, Inc.
(Applicant) 3800 West 143rd Street
Cleveland, OH 44111 (US)

Representative: f & e patent
Fleischer, Engels & Partner mbB, Patentanwälte
Braunsberger Feld 29
51429 Bergisch Gladbach (DE)

Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 6 December 2017
refusing European patent application No.
12003913.6 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman D. Semino
Members: F. Rousseau
A. Bacchin

Summary of Facts and Submissions

- I. The appeal lies from the decision of the examining division to refuse European patent application n° 12003913.6.
- II. The decision was based on two sets of claims filed respectively as main request with letter dated 6 August 2014 and as auxiliary request with letter dated 20 October 2017. Claims 1 of those requests were identical and read as follows:

"1. Use of a primer and/or pretreatment composition comprising

- (1) a film-forming resin for use in automotive OEM coating compositions, automotive refinish coating compositions, industrial coating compositions, architectural coating compositions, coil coating compositions, and aerospace coating compositions,
- (2) an adhesion promoting component, and
- (3) corrosion resisting particles comprising magnesium oxide particles having an average primary particle size of no more than 100 nanometers, as determined by visually examining a micrograph of a transmission electron microscopy ("TEM") image, measuring the diameter of the particles in the image, and calculating the average primary particle size of the measured particles based on magnification of the TEM image, wherein the primary particle size of a particle refers to the smallest diameter sphere that will completely enclose the particle,

to coat a metal substrate selected from aluminum, aluminum alloys, zinc-aluminum alloys and aluminum plated steel."

III. The European patent application was filed as a divisional of the earlier application n° 06802556.8 whose claim 1 read as follows:

"1. A primer and/or pretreatment coating composition comprising:

- (a) an adhesion promoting component; and
- (b) corrosion resisting particles selected from:
 - (i) magnesium oxide particles having an average primary particle size of no more than 100 nanometers;
 - (ii) particles comprising an inorganic oxide network comprising one or more inorganic oxides; and/or
 - (iii) chemically modified particles having an average primary particle size of no more than 500 nanometers."

IV. In the contested decision of 6 December 2017 the examining division held *inter alia* that claim 1 of the main request did not meet the requirements of Article 76(1) EPC as its subject-matter, in particular the combination of magnesium oxide particles having an average primary particle size of no more than 100 nanometers as corrosion resisting particles with a specific substrate to be coated (namely one selected from aluminium, aluminium alloys, zinc-aluminium alloys and aluminium plated steel), was not directly and unambiguously derivable from the parent application. A first selection had to be made as to the corrosion resisting particles among the alternatives in claim 1 of the earlier application independently of whether such a limitation was designated as an "invention", an "embodiment" or an "alternative" and a second selection had to be made as to the nature of the substrate limiting the list of useful metallic substrates provided in paragraph [0096] of the earlier application, therefore resulting in not disclosed

subject-matter. This conclusion was not changed by the presence of examples 5B, 6B, 6F, 6G and 6H as employed on test substrates in tables 59 and 61 of the earlier application which fell under the scope of the amended claim. Claim 1 of the auxiliary request was identical to claim 1 of the auxiliary request and therefore for the same reasons did not meet the requirements of Article 76(1) EPC.

- V. The decision was appealed and the statement setting out the grounds of appeal was submitted with letter of 16 April 2018 to which two auxiliary requests labelled "2. AUXILIARY REQUEST" and "3. AUXILIARY REQUEST" (hereafter auxiliary request 2 and auxiliary request 3, respectively) were attached. The main request and the auxiliary request (hereafter auxiliary request 1) on which the decision was based were maintained. Claims 1 of auxiliary request 2 and auxiliary request 3 were identical. They corresponded to claim 1 of the main request in which the metal substrate was defined to be selected from aluminum alloys.
- VI. With the statement setting out the grounds of appeal the appellant also submitted five annexes concerning an excerpt from Duden (entry "Liste", Annex A1), three excerpts from Wikipedia (entry "Aluminium" in German and English, Annexes A2 and A3 respectively; entry "Aluminium alloy" in English, Annex A4) and a photo and description of panel item number 21047 (Annex A5).
- VII. In preparation of oral proceedings, the Board issued a communication dated 14 April 2020 in which the Board came to the preliminary opinion that none of the appellant's requests met the requirements of Article 76(1) EPC. While concurring with the position of the

examining division the Board submitted a further reason why the subject-matter of claim 1 of the main request extended beyond the content of the application as filed, namely that the corrosion resisting particles were defined to comprise magnesium oxide particles according to option (i) of claim 1 of the parent application, rendering possible the presence of corrosion resisting particles of any type in addition to those defined by option (i), whereas claim 1 of parent application merely defined the use of corrosion resisting particles selected from options (i), (ii) and/or (iii).

- VIII. In response to the Board's communication, with letter of 15 May 2020 the appellant submitted auxiliary requests 4 to 7. Auxiliary requests 4, 5, 6 and 7 corresponded to the main request, auxiliary request 1, 2 and 3, respectively, wherein in claims 1 of the latter requests the wording "(3) corrosion resisting particles comprising" had been replaced by "(3) corrosion resisting particles selected from". These requests did not contain further amendments.
- IX. The oral proceedings took place on 16 June 2020. They were held by videoconference at the appellant's request.
- X. The appellant requested to set aside the decision under appeal and to remit the case to the examining division on the basis of one of the sets of claims of the main request or auxiliary request 1 on which the decision was based, or of auxiliary requests 2 and 3 filed with the statement setting out the grounds of appeal dated 16 April 2018, or of auxiliary requests 4 to 7 submitted with letter of 15 May 2020.

Reasons for the Decision

Main request - amendments - Article 76(1) EPC

1. According to Article 76(1) EPC, second sentence, a divisional application may be filed only in respect of subject-matter which does not extend beyond the content of the earlier application as filed. When determining whether the subject-matter of a divisional application extends beyond the content of the earlier application as filed, exactly the same principles are to be applied as for extension of subject-matter under Article 123(2) EPC (G 1/05, OJ EPO 2008, 271, point 5.1 of the Reasons).

This means that the subject-matter disclosed in the divisional application must be directly and unambiguously derivable by the skilled person from the earlier application as filed (G 1/06, OJ EPO 2008, 307, Headnote), in line with the so-called "gold" standard for assessing compliance of amendments to a patent application with Article 123(2) EPC (G 2/10, OJ EPO 2012, 376, point 4.3 of the Reasons).

2. Concerning feature (3) the parent application as filed does not disclose that the corrosion resisting particles comprised in the primer and/or treatment coating composition comprise magnesium oxide particles having an average primary particle size of no more than 100 nanometers, which would render possible the presence of corrosion resisting particles of any type in addition to those defined by option (i), whereas claim 1 of parent application merely discloses the use of corrosion resisting particles selected from options (i), (ii) and/or (iii), i.e. allows the use of

corrosion resisting particles in addition to those of option (i) which are selected only from options (ii) and/or (iii).

The appellant's argument that the "comprising language" for defining the corrosion resisting particles is based on paragraphs [0022], [0076] and [0078] to [0080] of the parent application as filed does not convince, because none of these passages has been shown to have to be read in the context of claim 1 of the parent application as filed, in particular in the context of magnesium oxide particles having an average primary particle size of no more than 100 nanometers in accordance with option (i). The skilled person has no reason to read these paragraphs in the light of claim 1 of the parent application as filed, not only because the "comprising language" is in contradiction with the unambiguous language of claim 1 of the parent application according to which only specific particles according to options (ii) and/or (iii) can be additionally used, but also because these paragraphs can be read in the context of additional independent claims of the parent application as filed such as independent claims 19, 36, 38 and 39 which do not contain said "consisting language".

Hence, feature (3) as defined in claim 1 of the main request has no basis in the parent application as filed.

3. Even if the Board, to the benefit of the appellant, considered that the passages cited by the appellant provided a basis in the parent application as filed for feature (3), one could not conclude that the claimed subject-matter meets the requirements of Article 76(1) EPC for the following reasons.

- 3.1 The appellant did not indicate any explicit single disclosure for the claimed **combination** of features, but rather relied on various separate passages of the earlier application as filed relating to **each of said features individually**. The mere fact that each of the features of claim 1 of the main request would as such, i.e. when read in isolation, be disclosed in the earlier application as filed is not sufficient to conclude that the skilled person would implicitly derive the presently claimed combination of features directly and unambiguously from the application as filed, using common general knowledge. In this context "implicitly" means that the skilled person would have found a disclosure for said combination of features as objectively and necessarily implied by the explicit content of the application as originally filed as a whole.
- 3.2 While conditions have been developed by the case law, such as the so-called "two-lists principle" (indeed starting from decision T 12/81 of 9 February 1982 in the context of the novelty analysis as cited by the appellant), they are not meant to be additional or alternative conditions to be checked, but only a possible aid in certain cases to verify whether the gold standard is satisfied and should thus not lead to a different result than when applying the gold standard directly. The appellant's argument that the definition of the corrosion-resisting particles in claim 1 of the earlier application is not given in the form of a list whose definition was given in Annex A1, but in the form of overlapping items is not decisive. The central question to be answered in order to assess whether the requirements of Article 76(1) EPC are met is therefore not whether the two-lists principle strictly applies in

the present case, with possible implications related to the precise meaning of the term "list", but whether the combination of features, in particular that of claim 1 of the main request, can be seen by the skilled person as directly and unambiguously derivable from the content as a whole of the parent application as filed, in agreement with decision T 783/09 of 25 January 2011 cited by the appellant.

- 3.3 For that purpose it has to be determined first whether the combination of "corrosion resisting particles comprising magnesium oxide particles having an average primary particle size of no more than 100 nanometers" and a substrate "selected from aluminium, aluminium alloys, zinc-aluminium alloys and aluminium plated steel" which the examining division found to be critical in assessing whether the requirements of Article 76(1) EPC were met is directly and unambiguously derivable from the whole of the parent application as filed.
- 3.4 Claim 1 of the parent application as filed relates to a "primer and/or pretreatment coating composition comprising an adhesion promoting component and corrosion resisting particles selected from (i) magnesium oxide particles having an average primary particle diameter size of no more than 100 nanometers; (ii) particles comprising an inorganic oxide network comprising one or more inorganic oxides; and/or (iii) chemically modified particles having an average primary particle size of no more than 500 nanometers". No specification of the kind of substrate to which the composition may be applied is present in any of the claims of the parent application referring to claim 1 (claims 2 to 16). Further coating compositions comprising an adhesion promoting component and

corrosion resisting particles are defined in independent claims 19 and 36, which contain however further alternative definitions of the corrosion resisting particles none of which corresponds to any of classes (i) to (iii).

3.5 Independently of the question whether claim 1 of the parent application as filed encompasses also embodiments with the combination of more than one of classes (i) to (iii) in view of the wording "and/or" (which appears to be the case and is also in conformity with the combination of particles used in some of the dependent claims and in a number of the examples of the parent application), it is clear that the parent application as filed discloses a number of alternatives as far as the corrosion resisting particles present in the compositions are concerned, only one of which is represented by the specific magnesium oxide particles according to option (i) of claim 1 of the parent application. This aspect of the original disclosure is unaffected by the fact that some of these alternatives may be partly overlapping, or by the question whether these alternatives are formally present in the form of a "list" or not. Moreover, it is completely unrelated to the question whether the parent application in its originally filed version lacked unity or not, alternatives (i) to (iii) representing different inventions as argued by the appellant, which in itself, although possibly being a reason for filing a divisional application, has no bearing on the requirements of Article 76(1) EPC and their fulfillment.

3.6 The appellant's argument that claim 1 of the parent application covered three different embodiments or inventions, which could have been drafted as three

different separate claims or in three separate applications, the first of which, namely option (i), would require no selection, fails to convince. The mere fact of choosing one of three different options or embodiments disclosed in the parent application, be it the first option disclosed therein, constitutes a selection among these three alternatives. Moreover, no argument was made that the earlier application as filed gave any preference for alternative (i). This also is not apparent from the whole parent application.

3.7 The supports to which the compositions of the parent applications may be applied are disclosed mainly in the original description, paragraph [0096], where the last two sentences concern metal substrates that may be coated with "such compositions" including "substrates comprising steel (including electrogalvanized steel, cold rolled-steel, hot-deep galvanized steel, among others), aluminium, aluminium alloys, zinc-aluminium alloys and aluminium plated steel", substrates which "comprise more than one metal or metal alloy" and substrates which "may be a combination of two or more metal substrates assembled together". In this paragraph, which starts with the indication "in certain embodiments" limiting the disclosure to part of the whole disclosure of the parent application, no mention is made of which kind of corrosion resisting particles are to be used in "such compositions". In particular no mention is present of specific magnesium oxide particles. Moreover, the aluminium related substrates present in claim 1 of the main request are only a few of the possible options which are listed.

3.8 In view of the above considerations neither the claims of the parent application, nor the general part of the description have been shown to provide the skilled

person with a direct and unambiguous disclosure of a use according to claim 1 of the main request with the above two critical features in combination. Thus, even if feature (3) were considered to be disclosed in the parent application as filed or construed as to define corrosion resisting particles selected from magnesium oxide particles in accordance with option (i) of the parent application, the two critical features relating to the corrosion resisting particles and the metal substrate would instead be disclosed only in separate parts of the parent application as possible options among several others for two different and independent aspects.

- 3.9 Furthermore, the parent application as filed does not require that the primer and/or pretreatment composition comprises a film-forming resin, the use thereof being implicitly described as optional. The appellant's argument that the skilled person would understand that it would not be possible to form such a primer and/or pretreatment composition without a film-forming resin is not supported by the unambiguous teaching of dependent claim 10 and paragraphs [00107], [00117] and [00128] of the earlier application as filed, according to which the composition may also comprise a film-forming resin.

Even if to the benefit of the appellant, the common general knowledge - which according to settled case law (G 2/10, supra, point 4.3 for the Reasons) is to be taken into account to assess what a skilled person would derive directly and unambiguously from the whole of the application documents as filed - would rather suggest the mandatory use of a film-forming resin, the deliberate and unambiguous choice of the applicant to define in the parent application as filed the use of a

film-forming resin as optional cannot be ignored. At best the skilled person would conclude on the basis of the explicit repeated disclosure in the parent application as filed rendering the use of a film-forming resin to be optional and the common general knowledge in this respect that the teaching concerning the use of a film-forming resin is ambiguous. Also for this reason the combination of features defined in operative claim 1 which does not only require the use of corrosion resisting particles comprising magnesium oxide particles having an average primary particle size of no more than 100 nanometers on a metal substrate selected from aluminum, aluminum alloys, zinc-aluminum alloys and aluminum plated steel, but also the presence of a film-forming resin the use of which would result from an additional selection by the skilled person, cannot be held to be directly and unambiguously disclosed in the earlier application as filed.

- 3.10 The disclosure of the examples does not change this conclusion. Out of the large number of examples of the parent application there are only 5 which fall under the wording of claim 1 of the main request, namely Examples 5B, 6B, 6F, 6G and 6H. Each of them, however, concerns a very specific disclosure, as far as e.g. the kind of particles, their size (average primary particle size of 20 nanometers for the magnesium oxide particles), the kind of resin (a mixture of phenolic and poly(vinyl butyral) resin combined with an epichlorohydrin-bisphenol A resin in case of Examples 6G and 6H) and the kind of support are concerned, which can hardly be seen as generalisable to the combination in claim 1 of the main request. It is further noted that this analysis is independent on whether the support used in these examples is in view of evidence A2, A3, A4 and A5 aluminium or an aluminium alloy.

Moreover, the appellant's argument that these examples provide better results in terms of corrosion protection of aluminum may be of interest for the question of inventive step, but is of no relevance for the fulfilment of the requirements of Article 76(1) EPC.

3.11 As pointed out in decision G 2/10 (supra, point 4.5.3 of the Reasons) it cannot be considered a principle that where an application discloses a general teaching and specific embodiments, groups thereof or areas, all other potential embodiments or intermediate generalisations falling within the ambit of the general teaching (but not as such disclosed in the application as filed) would thereby, by implication, inevitably also be disclosed. Whether the subject-matter defined now in claim 1 of the main request, which represents a restriction of the subject-matter of claim 1 of the parent application as filed or a generalisation of more specific embodiments disclosed therein, i.e. of Examples 5B, 6B, 6F, 6G and 6H, is directly and unambiguously derivable from the parent application as filed can only be decided having due regard to the circumstances of the present case.

3.12 The appellant, however, failed to show that the combination of options defined now in claim 1 of the main request would emerge in a direct and unambiguous manner in view of whole structure of the text of the parent application as filed, in particular when considering its claim 1 in the light of the application as a whole. The combination of features as defined in amended claim 1 is also not apparent in view of the examples, Examples 5B, 6B, 6F, 6G and 6H being not considered to be fairly representative of the subject-matter of claim 1 of the main request over its full scope. Submissions made starting from any of these

specific embodiments of the parent application as filed and explaining as to why a generalisation thereof based on the technical information contained in the parent application as filed would lead to the subject-matter of claim 1 in a direct and unambiguous manner were not provided either. Hence, also in view of the examples of the parent application as filed, it cannot be concluded that the subject-matter as defined in claim 1 of the main request was contemplated to the extent defined in that claim by the inventor of the parent application.

The underlying idea of Article 123(2) EPC is that applicants or patent proprietors shall not be allowed to improve their position by adding subject-matter not disclosed in the application as filed, since so doing would give them an unwarranted advantage and could be damaging to the legal security of third parties relying on the content of the original application (G 1/93, OJ EPO, 1994, 541, point 9 of the reasons for the decision). The same is valid for the requirement of Article 76(1) EPC, second sentence, having regard to the fact that this provision and that of Article 123(2) EPC serve the same purpose (Case Law of the Boards of Appeal, 9th edition 2019, II.F.2.1).

- 3.13 The primer and/or pretreatment coating composition of claim 1 was defined on filing of the parent application in a broad manner, its definition including as the sole structural features an adhesion promoting component and a corrosion resisting particles selected from (i) magnesium oxide particles having an average primary particle size of no more than 100 nanometers; (ii) particles comprising an inorganic oxide network comprising one or more inorganic oxides; and/or (iii) chemically modified particles having an average primary particle size of no more than 500 nanometers.

Subsequently introducing some limits into claim 1 on the basis of preferences or options defined in the parent application as filed for the purpose of overcoming objections based on prior art revealed in proceedings before the EPO, is allowable in view of the requirements of Article 76(1) EPC subject to the condition that the parent application as filed reveals, at least implicitly in a direct and unambiguous manner the resulting specific combination of features.

Allowing the various restrictions introduced into present claim 1 without there being any - even implicit - indication in the parent application as filed that the combination of newly introduced features was envisaged would be unfair to third parties. In particular, it would give an applicant who filed a broad speculative claim an unwarranted advantage over other applicants who were the first to attribute any significance to a specific combination of features encompassed by said broad original claim, e.g. a specific combination of features falling within the ambit of present claim 1 which does not overlap with the examples of the parent application.

The underlying principle is that any invention for which protection is sought, i.e. in the specific form claimed, and which therefore is meant to provide a contribution to the art justifying for a specified time the right to exclude others from exploiting the invention, must have been made at the date of filing the application and be properly disclosed therein. As indicated in point 2.3.3 of the reasons for G 1/03 (OJ EPO, 2004, 413) "*applicants deal with the state of the art of which they are aware (see Rule 27(1) (b) EPC)*" (now Rule 43(1) (b) EPC) "*and try to delimit the invention against it. For any further state of the art*

of which they are not aware, they draft fall-back positions for preferred (and more preferred) embodiments. In this way the invention as set out in the specification may appear like the skins of an onion and it becomes clear where the core of the invention is." Amending the subject-matter to address objections raised in view of prior art documents revealed in proceedings before the EPO is acceptable as long as a corresponding fall-back position can be considered to be disclosed in the application as filed. In the present case, the parent application as originally filed did not contain any fall-back position on the basis of which the combinations of features as presently claimed might be considered to be disclosed.

- 3.14 On this basis, claim 1 of the main request does not meet the requirements of Article 76(1) EPC. The main request is therefore not allowable.

Auxiliary request 1

4. Claim 1 of auxiliary request 1 is identical to claim 1 of the main request. It follows therefore that auxiliary request 1 is not allowable either.

Auxiliary request 2 and 3

5. Claims 1 of auxiliary request 2 and auxiliary request 3 are identical. They correspond to claim 1 of the main request in which the metal substrate is defined to be selected from aluminum alloys. The restriction of the list of possible metal substrate from aluminum, aluminum alloys, zinc-aluminum alloys and aluminum plated steel to aluminum alloys does not change the above reasoning according to which the claimed subject-matter cannot only result from a triple selection

within the whole content of the parent application as filed when using in combination the corrosion resisting particles and the substrates defined in operative claim 1, as well as a film-forming resin. This restriction also does not change the fact that Examples 5B, 6B, 6F, 6G and 6H cannot be considered to be fairly representative of the subject-matter of operative claim 1 over its full scope. On that basis, claims 1 of auxiliary request 2 and auxiliary request 3 do not comply with the requirements of Article 76(1) EPC either. These auxiliary requests are therefore not allowable.

Auxiliary requests 4 to 7

6. Auxiliary requests 4, 5, 6 and 7 correspond to the main request, auxiliary requests 1, 2 and 3, respectively, wherein in claims 1 of the latter requests the wording "(3) corrosion resisting particles comprising" had been replaced by "(3) corrosion resisting particles selected from". These auxiliary requests 4 to 7 which do not contain additional amendments were submitted with letter of 15 May 2020, i.e. after the summons to oral proceedings had been notified. This constitute an amendment to the appellant's appeal case, the admittance of which has to be considered at the Board's discretion under Article 13(2) RPBA 2020, taking into account the provisions of Articles 24 and 25 RPBA 2020.
- 6.1 According to Article 13(2) RPBA 2020, any amendment to a party's case filed after 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. As apparent from the appellant's submissions, the filing of the auxiliary requests

constitutes not only a legitimate, but a timely response to the additional objection raised by the Board in the communication under Article 15(1) RPBA 2020 dated 14 April 2020. The amendment introduced into these auxiliary requests does not go beyond amending the feature whose presence in the requests of higher ranking had been objected by the Board. These constitute in the Board's view exceptional circumstances within the meaning of Article 13(2) RPBA 2020 justifying to take into account the newly submitted auxiliary requests 4 to 7 into the proceedings.

- 6.2 Although it follows from the above point 2 that the replacement in claims 1 of the main request, auxiliary requests 1, 2 and 3 of the feature "corrosion resisting particles comprising" by the feature "corrosion resisting particles selected from" overcomes the separate objection against feature (3) of these claims 1, it also follows from above point 3 and the reasons indicated in points 3.1 to 3.13, 4 and 5 that this amendment is not suitable to overcome the finding that the subject-matter of claims 1 of the requests of higher ranking are not in keeping with the requirements of Article 76(1) EPC. Consequently, auxiliary requests 4 to 7 are not allowable either.

Order

For these reasons it is decided that:

The appeal is dismissed

The Registrar:

The Chairman:



B. ter Heijden

D. Semino

Decision electronically authenticated