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Written statement in re case no. G 3/19

To whom it may concern

Pursuant to Art 10(1) of the Rules of Procedure of the Enlarged Board of Appeal, we hereby submit the attached amicus curiae brief in re case no. G 3/19 – Art 164(2)“Pepper”.

Our submission follows the communication of the Enlarged Board of Appeal dated 5 Mai 2019 regarding the referral under Art 112(1)(b) EPC of the President of the European Patent Office of questions relating to decision no. T 1063/18 dated 4 April 2019, their publication and respective reasoning.

Kind regards

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Summary

1. Regarding the importance of the substantive law issues involved in re case no. G 3/19, there are good reasons to hold the referral admissible by broadly interpreting Art 112(1)(b) EPC with functional considerations. The EBA is the highest interpretative authority within the EPC system and therefore should address the related questions of patentability.
2. Rule 28(2) EPC should be upheld but combined with a narrower interpretation of essentially biological processes as set out in Rule 26(5) EPC. This would create a coherent system of protection for plant innovations where plant varieties are excluded from protection even if they would fulfil the general patentability criteria but where other technical processes and products (like plants not restricted to a single variety, cf. G 1/98) are, in principle, patentable subject to a clear claim-drafting limiting the scope of the claims to technical processes or to products of such technical processing.
3. A narrow definition of essentially biological processes as non-technical processes would also be in line with the assessment of software-implemented inventions. A mix of technical and non-technical elements is not excluded per se but examined. When assessing the inventive step of such a mixed-type invention, only those features which contribute to the technical character of the invention are taken into account.
4. Applying these principles would find not only genetic engineering and new breeding techniques manipulating the plant genome directly but also smart breeding patentable in principle, regardless of whether processes or products are claimed. However, due to the general patentability requirements, innovations in plants as products may only be patentable if new and inventive traits are not only claimed by mere phenotypical description but also by explicitly stating the underlying genetic sequence.

A. Admissibility

Dated 4 April 2019, the President of the European Patent Office referred two questions relating to a decision by the Board of Appeal 3.3.04 of 5 December 2018 (T 1063/18 – Extreme dark green, blocky peppers/SYNGENTA) to the Enlarged Board of Appeal in accordance with Art 112(1)(b) EPC (cf. Communication from the Enlarged Board of Appeal concerning case G 3/19, OJ EPO 2019, A 52). Pursuant to Art 112(1)(b) EPC, the President of the EPO may refer a point of law to the EBA where two Boards of Appeal have given different decisions on that question – in order to ensure uniform application of the law, or if a point of law of fundamental importance arises.

I. Art 112 (1) (b) EPC – different decisions by two Boards of Appeal

Admissibility of a president's referral under Art 112(1)(b) EPC requires, by virtue of its wording, the existence of different decisions of two Boards of Appeal (BoA). Whereas "different" has been understood in a narrow sense as "conflicting" (G 3/08 – Patentability of programs for computers, OJ EPO 2011, 10, Headnote 3) in order to prevent the referral of abstract points of law, the requirement of "two Boards of Appeal" was interpreted in a broader sense as e.g. also comprising situations in which the same Board has given different decisions on a specific question or in the case of different decisions by the Legal Board of Appeal in varying compositions (cf. G 1/04 – Diagnostic methods, OJ EPO 2006, 334; G 4/98 – Designation fees, OJ EPO 2001, 131). Although differences in the examination office's practice based on instructions in the guidelines of examination in comparison with decisions by the BoA have hitherto not been regarded as sufficient to comply with the requirements of Art 112(1)(b) EPC, a limitation of said provision leading to an undue restriction of the presidential right to referral was considered inappropriate (G 4/98, Reasons point 1.2). Because it requires two different decisions respectively, Art 112(1)(b) EPC is considered to especially serve the main purpose of ensuring uniform application of the law whereas this does not lead to a narrow understanding of the term "two Boards of Appeal" (e.g. Schulte – *Moufang*, Art 112 EPÜ, para. 11, 37 et seq.).

The referral is based upon the assumption of conflicting case law regarding the substantive approach and the way in which the Boards of Appeal have assessed newly drafted Rules implementing Art 53 EPC under Art 164(2) EPC (Question 1, cf. Referral, sec. I). Question 1 refers to the reasoning in T 1063/18 with regard to the limits to the Administrative Council's (AC) law-making powers by means of

the Implementing Regulations (cf. i.a. G 6/95 – Interpretation of Rule 71a(1) EPC/GE CHEMICALS, OJ EPO 1996, 649, Reasons point 4, according to which Art 164(2) EPC limits the competences of the AC pursuant to Art 33(1)(c) EPC arguing that the AC “may not amend the Implementing Regulations in such a way that the effect of an amended Rule would be in conflict with the EPC itself (‘this Convention’)”). In T 1063/18 (Reasons point 26), the board embraced the findings in T 39/93 – Polymer powders/ALLIED COLLOIDS, OJ EPO 1997, 134):

“Thus, the board agrees with the finding in decision T 39/93 (see Reasons point 3.2) that ‘the meaning of an Article of the EPC (...), on its true interpretation as established by a ruling of the Enlarged Board of Appeal cannot (...) be overturned by a newly drafted Rule of the Implementing Regulations, the effect of which is to conflict with this interpretation.’”

Pursuant to the referral, this view (also adopted in T 83/05 – Broccoli/PLANT BIOSCIENCE, OJ EPO 2007, 644, Reasons point 57) lead to an equation of “law”, i.e. provisions of this Convention, within the meaning of Art 164(2) EPC with “case law”, i.e. the interpretation of a given Article by the EBA, thus excluding any subsequent clarification (Referral, para. 6). This is claimed to be especially in conflict with the findings in T 315/03 – Transgenic animals/HARVARD (OJ EPO 2006, 15) as well as T 272/95, T 666/05, T 1213/05, which are also cited as fostering the interpretative competences of the AC towards Art 53 EPC. The board in T 315/03 (Reasons point 7.3) held:

“(...) one cannot combine a legislative provision with case law interpretation to construct an artificial vires by which to judge or rule an action as ultra vires.”

When the board was criticizing such an approach as a “legal impossibility”, it was concerned with an earlier interpretation of an Article (here: Art 53(a)) of the EPC by a Technical Board (3.3.02 in T 19/90) and not by the Enlarged Board of Appeal (EBA) – only the latter of which is issued in order to ensure a uniform application of the law. Still, we would like to show at this point that T 39/93 and T 1063/18 on the one hand and T 315/03 on the other hand might be considered as dealing with a similar subject upon which they decided in a conflicting way: For one thing, even a decision by the EBA only directly binds the referring board with regard to the referred questions under Art 112(1)(a) EPC pursuant to Art 112(3) EPC. The EPC does not provide for a further direct binding effect of either decisions or opinions by the EBA on the BoA and the examining divisions. On the other hand, despite the lack of a formal binding effect of precedent case law, both EBA and BoA decisions/statements are considered to de facto bind the judicial bodies of the EPO (cf. Art 20, 21 RPBA; BeckOK – *Cimniak* Art 112 EPÜ

para. 13 et seqq.; T 1063/18, Reasons, point 21 with further references; recently *Haedicke*, GRUR Int 2019, 885, 889; also submitted as amicus curiae brief re G 3/19). Without further discussing or challenging the binding effect of judicial decision-making within the EPO beyond the specific case, at this point we would like to hold that there seems to be no reason to differentiate between the notion of case law interpretation by the BoA or the EBA respectively from a legal-technical point of view.

While it may not be “undoubtedly unreasonable” (Benkard – *Schäfers/Henke*, Art 164 EPÜ, para. 30) to assume that the meaning and scope of an Article of the EPC as interpreted by the EBA cannot be overturned by a newly drafted Rule of the Implementing Regulations (as established in T 39/93), there is at least “potential for confusion” with regard to T 39/93 that might cause the EBA to consider the referred question substantively (cf. G 3/08, Reasons point 13.5; further reference below). T 315/03 reflects a general understanding of a difference between merely “notional ‘law’” (T 315/03, Reasons point 7.3) pursuant to any earlier interpretation (by the BoA or the EBA) and the meaning and scope of a provision that might be subject to legal development and subsequent interpretation.

The referral derives such an understanding by additionally pointing out remarks in G 2/07 – *Broccoli/PLANT BIOSCIENCES* (OJ EPO 2012, 130; accordingly G 1/08 – *Tomatoes/STATE OF ISRAEL*, OJ EPO 2012, 206). In its decision, the Enlarged Board discussed and affirmed the Administrative Council’s competence – limited by means of Art 164(2) EPC – also with regard to substantive patent law (G 2/07, Reasons point 2.2). Furthermore, it did not accept the referring board’s reasoning pursuant to T 39/93 against the validity of a newly drafted rule (now Rule 26(5) EPC) the effect of which was allegedly in conflict with an earlier interpretation of an Article (Art 53(b) EPC) by the EBA (G 2/07, Reasons point 2.4). It did however not explicitly discard such a reasoning itself, but the assumptions upon which it was based, namely that Rule 26(5) EPC was clear enough to be in conflict with an Article of the EPC and thus make a case under Art 164(2) EPC:

“As has been set out under 2.2 above, the legislator is entitled to provide for issues of substantive law in the Rules of the Implementing Regulations. However, in order to enable the Article to which a Rule pertains to be interpreted by means of the Rule, such Rule must at least be clear enough to indicate to those applying it in what way the legislator intended the Article to be interpreted by means of that Rule. That is not the case for Rule 26 (5).” (G 2/07, Reasons point 5)

At any rate, T 315/03, also read in conjunction with G 2/07, portrays a certain conflict as far as the understanding of the term ‘ultra vires’ and the consequenc-

es of deeming an action or Rule as such is concerned that might render the referred Question 1 admissible. Furthermore, it is not merely theoretical as can be derived by reference to the cited case law dealing with the interpretative competences of the AC pursuant to Art 33(1)(c) EPC as limited by means of Art 164(2) EPC. Whether the meaning of an Article of the EPC *as interpreted by the EBA* might be changed by means of amending the Implementing Regulations is a question of actual significance which has not been conclusively resolved as of now (*Moufang*, Rechtsprechung und Auslegungsmethodik der Großen Beschwerdekammer des EPA, in: Metzger (ed.), Methodenfragen des Patentrechts, 2018, 31, 62). Specifically, earlier BoA decisions seem to follow different approaches towards the assessment of a Rule as a clarification or an amendment of an existing provision, namely Art 53 EPC. Question 2 closely relates to these aspects (cf. Referral, para. 18) and follows consequentially from the possible different approaches the EBA could take on Question 1.

While many commentators regard the respective conflict over the interpretation of Art 53(b) EPC as a minor issue compared to the controversial relationship between the institutions within the EPO (cf. *Haedicke*, op. cit., p. 889 further referring to the alleged “frequently overestimated” number of applications) as reflected in Question 1, we argue that Question 2 addresses a substantial uncertainty with many practical implications prospectively. An actual increase in the number of patent applications on so-called “native traits” has already been described as well as the inherent effect of chilling effects, currently mainly due to legal uncertainty, limited patent experience and potential costs of monitoring and negotiating (e.g. *Kock/Ten Have*, 11 Journal of Intellectual Property Law and Practice (2016) 496 (502 et seq.), Figure 1.). Moreover, while the impact of patents on the freedom to operate in commercial plant breeding might still be hardly measurable, a further increase with regard to commercially valuable patents covering marketed plant varieties especially in the light of technological progress in plant breeding could significantly limit the free availability of and access to biological material prospectively (cf. *Kock*, Patenting non-transgenic plants in the EU, in: Matthews/Zech (eds.), Research Handbook on intellectual property and the Life Sciences (2017), p. 134 et seq.). In the following, we do not only want to express the limiting but also the possible navigating function of Art 53(b) EPC with regard to responsible claim drafting, thorough assessment and, consequentially, an adequate scope of protection also in respect of science-based, technological innovations in plants.

Question 2 should therefore also be considered at least in the light of a functional understanding of Art 112(1)(b) EPC as suggested below.

II. Functional understanding of Art 112(1)(b) EPC

We perceive and acknowledge the disapproval of parts of the patent community towards the legality of the given referral as an option chosen to address the alleged conflict between decisions of the EPO Boards of Appeal and Rule 28(2) EPC following the decision of the Board of Appeal 3.3.04 in T 1063/18 (cf. i.a. CIPA position paper dated 25 March 2019; amicus curiae brief re G 3/19 by KSVR Patentanwälte dated 24 May 2019, No. 12 et seqq; fundamentally *Haedicke*, op. cit.). If the EBA should accordingly refrain from applying Art 112(1)(b) EPC directly, especially with regard to Question 2, we promote a broader application and substantive consideration of the referred questions in the light of the purpose and effect of referrals to the Enlarged Board of Appeal.

While early drafts of the EPC still contained a broad presidential right to “at any time ask the Enlarged Board of Appeal for an opinion on any question, except where such question arises in proceedings on a case” (Art 112a(1)(b) Draft Convention 1969, Travaux Préparatoires EPC 1973, BR/11 e/69, p. 96), the recent version provides for a right to refer “any question to the EBA if it considers that a decision is required for the above purposes (*uniform application of the law/point of law of fundamental importance*)” only to the BoA (Art 112(1)(a) EPC). In general, it has been pointed out that the EBA is by no means a further appeal body (especially with regard to referrals under Art 112(1)(a) EPC) but an organ to safeguard the uniform application of the law as well as to answer questions of fundamental importance insofar as they do not relate to merely hypothetical or purely academic settings (e.g. *Moufang*, op. cit., p. 34). The limitation of the presidential right to referral to the situation in which two BoA have given different decisions on a specific question correspondingly aims to avoid the referral of abstract points of law (susceptible to predetermining future decision-making) and serves the intention of the drafters of the EPC to emphasize the EBA’s position as a court, and not an advisory judicial body (e.g. *Steinbrener*, GRUR Int 2008, 713, 714 et seq.). Still, Art 112(1)(b) EPC is also considered as a counterbalance to the discretion granted to the BoA in deciding whether a referral under Art 112(1)(a) EPB is required (*Steinbrener*, op. cit., 718), and thus reflects a compromise between different proposals rather than an eternal guarantee.

The present case reflects that in an institutional setting where the legislator is an international organization with 38 member states, the examining offices are bound by clearly drafted Implementing Regulations, and the Boards of Appeal are comprehensibly only obliged to refer questions they interpret as controversial, situations may arise where the uniform application of the law with regard to fundamentally important questions is at stake and calls for a solution pursuant to flexibly applied procedural provisions in the EPC, the complementary interpretation of which is not per se excluded (cf. Art 125 EPC; *Schachenmann*, GRUR Int

2008, 703, 706, however arguing with due prudence). Whereas we do by no means want to promote a presidential right to refer “any question at any time”, the EBA should, in our opinion, not restrain its effective judicial oversight due to an intention to adequately limit the president’s rights especially where a restriction of the future decision-making process is not to be feared.

It goes without saying that the EBA remains independent, is explicitly free to discard the “outcome the referral promotes” and confirm the interpretive considerations in T 1063/18 in line with its own argumentation in G 2/12 – Tomato II (OJ EPO 2016, A 27) and G 2/13 – Broccoli II (OJ EPO 2016, A 28), thus rendering the referral unnecessary at worst. However, even for those comprehensibly arguing against the validity of Rule 28(2) EPC on the substantive level and for the necessary implementation of such a provision in the EPC itself as well as for inventors and breeders with pressing practical concerns, the possibility of the EBA to reconsider its earlier rulings in the light of subsequent developments creates more legal certainty than the substantiated guidance by the BoA. Pursuant to such a broad understanding of Art 112(1)(b) EPC, it also comprises differences in the examination office’s practice based on Rules in the Implementing Regulations contrary to decisions of the BoA. Such an understanding of Art 112(1)(b) EPC is not in direct conflict with G 4/98 which was only referring to divergent office practice based on the examination guidelines to not meet the requirements for admissibility (cf. Referral, para. 22).

For practical reasons, the need for expeditious clarity especially persists with regard to the perceived conflict between Art 53(b) EPC and Rule 28 (2) EPC: The lengthy and cumbersome endeavour of amending the EPC could in one way or the other eventually be in conflict with European Law with binding effect on the majority of contracting states of the EPC. The efficacy of insisting on the vires of ambiguous case law interpretation outweighing the interpretative competences of the AC while categorically rejecting the possibility of a clarifying statement by the EBA on the subject does, regardless of all technical finesse, not seem too striking on an actual base. In the given situation, legal certainty may effectively and swiftly be reached by an opinion of the EBA rather than awaiting European Community legislation within the meaning of Art 33(1)(b), (5) EPC, guidance by the CJEU or another presumably conflicting decision by any BoA on the validity of Rule 28(2) EPC.

III. Conclusion regarding admissibility

Taking everything into account, we would therefore appreciate the issuance of substantive considerations at least in the context of evaluating whether a conflict

exists that could allow for the direct or functional application of Art 112(1)(b) EPC comparable to the approach in G 3/08 (cf. also G 3/95 – Inadmissible referral, OJ EPO 1996, 169). When assessing admissibility, the EBA should consider both questions referred to it by the President of the EPO substantively, though in the light of the importance of said Article (cf. G 3/08, Reasons point 8, 11 et seqq.).

B. Substantive considerations

I. Subsequent practice

In the substantive considerations of the referral to the EBA, the President of the EPO raises the issue that subsequent agreement and practice should be taken into account when interpreting Art 53(b) EPC (Referral, paras. 100-112). We are convinced that an interpretation of Art 53(b) EPC which deviates from the older case law (namely in G 2/12 and G 2/13) may be justified in light of the subsequent practice of EPO and EPO member states.

According to Art 31, 32 of the Vienna Convention of the Law Treaties (VCLT), which is regularly used by EBA as basis of interpretation (since G 1/83 – Second medical indication, OJ EPO 1985, 60), subsequent agreement and subsequent practice of the parties to a contract may take different forms and be of different authority (see on the following International Law Commission, Draft Conclusions of 2018: Subsequent agreements and subsequent practice in relation to the interpretation of treaties, UN, Doc. A /CN.4/L.907, with commentaries, UN, Doc. A/73/10):

- according to Art 31(3)(a) VCLT, any subsequent agreement between the parties regarding the interpretation of the treaty shall be taken into account; such agreement may take different forms including the decision of an organ of an international organisation; however, the agreement must be taken unanimously (ILC Draft Conclusion with Commentaries, p. 28);
- according to Art 31(3)(b) VCLT, any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation shall be taken into account; in this regard every conduct of state parties is of relevance if it occurs in the application of the treaty whereas national practice applying national law is irrelevant; subsequent practice in this sense requires unanimity but inactive parties may still accept the practice; by contrast, deviant

practice by some states may hinder the application of Art 31(3)(b) VCLT (ILC Draft Conclusion with Commentaries, p. 31-32, but see to the contrary e.g. ECHR, *Loizidou v. Turkey*, preliminary objections, No. 15318/89, 23 March 1995, ECHR Series A No. 310, para. 79);

- according to Art 32 VCLT recourse may be made to supplementary means of interpretation; those supplementary means are not restricted to the travaux préparatoires but may also comprise subsequent practice of the state parties (ILC Draft Conclusion 4 para. 3: 'A subsequent practice as a supplementary means of interpretation under article 32 consists of conduct by one or more parties in the application of the treaty, after its conclusion. '); different from subsequent practice under Art 31(3)(b) VCLT, Art 32 VCLT does not require the same conduct of all the parties; in this broader sense "subsequent practice" covers any application of the treaty by one or more (but not all) parties; it can take various forms, including decisions of organs of international organisations and reactions of member states to decisions of such organs (ILC Draft Conclusion with Commentaries, p. 33-36).

In application of these principles of interpretation, the EBA should consider the different reforms on the national level of EPC member states as well as the decisions taken within EPO AC as subsequent practice:

- the referral of the President of the EPO has listed a considerable number of amendments to national patent laws excluding plants resulting from essentially biological processes from patentability (see Referral, para. 108); these reforms admittedly do not reflect an unanimous practice of EPC member states; but this does not hinder to qualify them as subsequent practice in the sense of Art 32 VCLT. In this regard, it should be noted that several of these reforms have been enacted as a reaction to the case law and practice of EPO before and after the decisions G 2/12 and G 2/13). They are therefore not mere national practice but rather reflect a reaction of EPC member states to the developments within EPO; the same holds true for the political declarations taken by the European Commission, the European Parliament and the Council regarding the interpretation of the Biotech Directive 98/44/EC (European Parliament, Resolution on patents and plant breeders' rights, 2015/2981(RSP), 17 Dec 2015; Commission Notice, C 411/03, 8 Nov 2016; Council Notice, 5808/17, 3 Feb 2017) and the declarations of EU member states to be in full compliance with the Commission Notice (Referral, para. 104); the interpretation of the Biotech Directive has indirect effect on the interpretation of the EPC since Rule 26(1) EPC refers for the interpretation of the respective provisions of the EPC, including Art 53(b) EPC, to the Biotech Directive;

- also, the decision taken by the AC to introduce Rule 28 (2) EPC (CA/D 6/17, OJ EPO 2017, A 56) should be qualified as subsequent practice of EPC member states in the sense of Art 32 VCLT; decisions of organs of international organisations may represent subsequent agreement or practice. Member states of the EPO are represented by their delegates in the AC. The decisions taken by the AC may therefore be qualified as subsequent practice of the EPC member states; this is even so, as indirectly pointed out in the referral of the President of EPO (Referral, para. 105), if not all member states but a broad majority voted in favor of the decision to implement Rule 28 (2) (the vote was taken with one vote against - Austria - and one abstention).

We therefore consider it as appropriate that the EBA takes into account the subsequent agreement and practice of EPC member states in the interpretation of Art 53(b) EPC, especially those incidents that occurred after the decisions G 2/12 and G 2/13 and which reflect the position of the majority of EPC member states with regard to the patenting of plants obtained by essentially biological processes. The EBA should take the opportunity given by these different layers of subsequent practice to reconsider its decision to grant patents on plants obtained by essentially biological processes. The legal situation in October 2019 differs from the situation in March 2015 when the cases G 2/12 and G 2/13 were decided.

II. Coherence of the European system

The EBA has since its first decision regularly emphasised the goal of a coherent development of the European patent system and the national patent systems of its member states (G 1/83, para. 6):

“In the interpretation of international treaties which provide the legal basis for the rights and duties of individuals and corporate bodies it is, of course, necessary to pay attention to questions of harmonisation of national and international rules of law. This aspect of interpretation, not dealt with by the provisions of the Vienna Convention, is particularly important where, as is the case with European patent law, provisions of an international treaty have been taken over into national legislation. The establishment of harmonised patent legislation in the Contracting States must necessarily be accompanied by harmonised interpretation. For this reason, it is incumbent upon the European Patent Office, and particularly its Boards of Appeal, to take into consideration the decisions and expressions of opinion of courts and industrial property offices in the Contracting States.”

This goal of a coherent development is also expressed in the Preamble of the EPC ("desiring to strengthen cooperation between the States of Europe in respect of the protection of inventions").

It must therefore be a goal in itself to bridge gaps and differences between the EPC and the national patent legislation where ever possible by a way of a careful interpretation of the provisions of the EPC.

III. Principles of purpose-oriented interpretation

The interpretation of international treaties "in the light of its object and purpose" in accordance with Art 31(1) VCLT gives more leeway for teleological considerations than it becomes visible in the current case law of EPO with regard to plant patents. Even though in its decisions G 2/12, G 2/13, the EBA declares that it must take into account the legal, social, economic goals of the provisions of the EPC (Reasons, VII., 3.), its reasoning on the "purpose" remains nevertheless underdeveloped, since EBA concludes that the purpose of Art 53(b) EPC is "not sufficiently obvious" and it would thus be for the legislator to clarify the question. Following the same line of arguments, the BoA in T 1063/18 acknowledges interests of breeders to reserve their freedom to operate and of inventors to benefit from their work but then concludes: "However, balancing these interests is a matter for the legislative body. Such considerations cannot play a role in the legal assessment of the issues raised in the present case." (Reasons, point 41). This cautious approach does not reflect the full potential of arguments of purpose in the interpretation of treaties.

"Purpose" in the sense of Art 31(1) VCLT must not be reduced to the specific purpose of a given provision but refers to the purpose of the whole treaty (*Dörr/Schmalenbach, Vienna Convention on the Law of Treaties: A Commentary* (2018), p. 585). "Purpose" in this sense is not necessarily the purpose that the drafters of a treaty had in mind; rather the purpose has to be determined by the text and the context of the given provision (*Dahm/Delbrück/Wolfrum, Völkerrecht*, 1988, p. 644). The VCLT clearly follows an objective method of interpretation; preparatory work of the treaty and the circumstances of its conclusion are only supplementary means of interpretation, see Art 32 VCLT. In determining the purpose of a provision, arguments of intuition and common sense may be taken into account (*Dörr, op. cit.*, p. 585). The purpose-oriented interpretation is also the basis of arguments of "effet utile" according to which the words of treaty ought to be given appropriate effect (*Dahm/Delbrück/Wolfrum, op. cit.*, p. 646; *Dörr, op. cit.*, p. 578-79). Still, any purpose-oriented interpretation must remain within the limits of the text; it is one of the potential interpretations that prevails

in light of the object and purpose of the treaty (*Villiger, Commentary on the 1969 Vienna Convention on the Law of Treaties, 2008, p. 428*).

The EBA in its decisions G 2/12 and G 2/13 as well as the BoA in case T 1063/18 do not engage in a self-reliant developing and weighing of arguments regarding the legal, social and economic goals of the provision. We endorse EBA to take a more active role in the current conflict over plant patents and develop a coherent concept of protection which is not restricted to mainly textual and systematic arguments.

IV. Purpose-oriented and functional approach

1. Purpose of Art 53(b) EPC

Any attempt to extract the purpose of the exclusions to patentability under Art 53(b) EPC is marked by elaborated systematical, historical and/or legal policy arguments (cf. recently G 2/12 and various amicus curiae submissions respectively). In general, it all seems to boil down to the question whether Art 53(b) EPC serves to exclude from patentability inventions in one technical field, namely breeding, particularly specifying the exclusion in Art 53(a) EPC, and being comparable to Art 53(c) EPC (formerly Art 52(4) EPC 1973), or whether it rather establishes a tool to further clarify the concept of technicality comparable to the presumptive examples in Art 52(2) EPC referring to discoveries and abstract ideas which as such do not qualify as inventions as the legitimate object of patent protection.

The EBA, in its decisions G 2/07 (G 1/08) expresses a view towards the first-mentioned approach in stating that:

“The exclusion of essentially biological processes for the production of plants from patentability has and always has had its place in a provision which defines exceptions from patentability. It is common ground that, by contrast to the subject-matters listed in Art 52(2) EPC, the subject-matters listed in Art 53 EPC are inventions but shall, however, not be patentable. (...) However, since the respective legislative purposes behind the sub-items in Art 53 EPC and even those behind the alternatives of Art 53(b) EPC are quite different, the systematic context of the exclusion of essentially biological processes from patentability, namely its place in Art 53(b) EPC, does not as such indicate what the purpose of the provision is. It only allows the conclusion that some kinds of processes must be excluded even though they are inventions, and that, hence, the exclusion may not be interpreted in a way that it would be entirely deprived of any

field of application and thereby rendered obsolete.” (Reasons, point 6.4.2.1.)

The EBA accordingly does not assess whether the breeding processes described in the respective claims were technical as a whole but defined certain characteristics/steps to render the process “essentially biological”, and thus not eligible to patent protection (cf. *Kock/Zech*, GRUR 2017, 1004, 1007) – even if they would qualify as patentable inventions.

In applying the principle of narrow interpretation, the EBA also embraces the former understanding in G 2/12 (G 2/13) at least with regard to the definition of the exclusion of essentially biological processes as being genuinely such, further stating that: “the ‘system’ of exclusions from patentability according to Art 53 EPC is characterized by a listing of specific inventions for which a European patent is not to be granted.” (Reasons, point 2. 3) a)). Accordingly, product claims directed to plants obtained by means of essentially biological processes (*other than plant varieties*) shall be allowable as long as they are not explicitly excluded from patentability – even if the protection thus conferred encompasses the generation of the claimed product by means of an essentially biological process excluded as such under Art 53(b) EPC (Verdicts).

These results rely on the assumption that the purpose of Art 53(b) EPC with regard to essentially biological processes was not sufficiently clear and “quite different” from the legislative intention with regard to the other “alternatives” in said Article. According to the prevailing understanding, the process-exclusion particularly served a different purpose than the exclusion of plant varieties as such, which has primarily been derived from the legislative history. In the following, we would like to show that the groups of exclusions in Art 53(b) EPC can be mutually considered in order to extract an overarching function.

The EBA dealt with the first group of exclusions in its decision G 1/98 – Transgenic plants/NOVARTIS (OJ EPO 2000, 111). A narrow understanding of the exclusion of plant varieties was derived from the legislative history, especially the parallel development of international patent and plant breeder’s rights systems, the latter of which contained, until 1991, an obligatory ban on double-protection binding to several Contracting States of the Strasbourg Patent Convention (SPC). Art 53(b) EPC was derived from Art 2(b) SPC which contained the facultative possibility to exclude plant and animal varieties and essentially biological processes for the production thereof in order to give UPOV members the possibility to participate in the newly established international patent regime – and not to exclude patent protection for plant varieties (cf. Reasons points 3.4 et seqq.). In G 1/98 the EBA held that “a claim wherein specific varieties are not individually claimed is not excluded from patentability under Art 53 (b) even though it may

embrace plant varieties" (Headnote I). This leads to the "peculiar, though CJEU-confirmed, consequence" (*Kock/Zech*, GRUR 2017, 1004, 1006), that plant varieties (irrespective of the way in which they were produced) are not patentable as such but may fall under the scope of a patent claim. The EBA, referring to

"representation from the plant breeder's side calling for the elements of plant variety protection and patent protection to be harmonized in such a way that together the two forms of protection would constitute a single comprehensive system industrial property protection for plant innovations permitting neither overlapping nor gaps in the protection of eligible subject matter",

further held that

"(In this respect), the purpose of Art 53(b) EPC is quite different from the purpose of Art 52(4) EPC (now: Art 53(c) EPC). In the latter provision, gaps in the protection of eligible subject-matter are deliberately accepted in order to free from restraint non-commercial and non-industrial medical and veterinary activities". (Reasons, point 3.7)

Remarkably, the calls against "overlapping" protection are not referred to in the second half of the statement. At any rate, the established purpose of Art 53(b) EPC to only exclude subject-matter for which protection under a plant breeders rights' system was available, does not explain the exclusion of animal varieties and processes for their production, for which neither a statutory ban on double-protection nor a complementary system of protection has ever existed.

Without challenging the verdicts of G 1/98 in respect of products obtained by technological processes, we would like to phrase our concerns as regards the assessment of the original ban on double-protection implemented in Art 53(b) EPC as serving an end in itself. The exclusion in Art 53 (b) shall therefore be considered and interpreted in the light of the comprehensible purpose that would nowadays also be assigned to any ban on double-protection: Avoiding deterrence and blocking effects in a sector that is as much built upon cooperation and incremental innovation as the breeding sector. Preventing double-protection and possible resulting blocking effects is an accepted systematic aim in intellectual property law. The historic purpose is to be seen in the light of subsequent developments, especially the advent of genuinely technological methods of producing novel plants. The exclusion of essentially biological breeding processes may then be seen as an instrument to prevent circumvention strategies by excluding plant varieties *and* methods of obtaining such varieties. At the same time, by limiting the excluded processes to non-technical processes, it respects the limits of Art 27(1) and (3) TRIPS. Art 27(3)(b) TRIPS expressly states that "Members shall provide for the protection of plant varieties either by patents or by an effec-

tive *sui generis* system or by any combination thereof". The use of the word "effective" means that in the area of plant innovations no gaps of protection should occur.

We do not want to confirm an understanding of the principles established in G 1/98 to the extent that they have to be applied "mutatis mutandis" to the situation where the product of an essentially biological breeding process is not a variety, and therefore patentable. Neither do we promote the assumption of patentability of any breeding process that does not directly lead to the production of a variety as such (cf. also G 2/07, Reasons point 6.1.1). Rather, every product as well as every process has to be assessed in sufficient detail with regard to Art 52 EPC as well as (Artt 54, 56, 83), in the light of the purpose of Art 53(b) EPC, optimally already in the first instance.

With regard to the assessment of clarity and inventiveness, it may be noted that in re EP 2753168 an analysis of the pre-existing San Luis Ancho pepper plant was still pending at the time of the decision of the BoA which remitted the case to the examining division. (T 1063/18 sec IV. and IX.) Conducting a thorough and expert analysis of such objections might lead to a more balanced and restrictive granting practice in the first place, higher patent quality, narrower, thus more legitimate, scope of protection and eventually a fair balancing of interests as is advocated for by patent law's functions without having to walk the tightrope of ethical evaluation. However, if such an analysis is not conducted adequately, there is an actual risk of too many broad claims being granted in respect of unpatentable subject-matter (e.g. the Tomato patent as claimed in re G 2/12, cf. op. cit. II. 4.).

We therefore promote that patents claiming the products of breeding processes that are only described with reference to phenotype and deposited propagation material or by means of their essentially biological (i.e. aleatoric; cf. below) process of production may not be granted. Moreover, it should not be possible to grant broad claims on products that may, in principle, be produced by technical processes or by biological processes and to refer to the technical process used for their production only in the description or in the descriptive part of product-by-process claims. Such over-inclusive claims covering also products of non-technical breeding methods should not be granted or otherwise be subject to later invalidation. Rule 28(2) EPC may serve the aim of avoiding respective patents. It should however not be used as a reason to refuse protection per se without an in-depth analysis of any claim to meet the requirements for patentability.

2. Definition of essentially biological processes

From a functional perspective, the patentability of plants obtained by means of an essentially biological process is closely linked with the interpretation of essentially biological processes. The scope of essentially biological processes determines the factual effect of an exclusion of patentability of plants obtained by means of an essentially biological process.

The EBA decisions G 1/08 and G 2/07 on the one side and G 2/12 and G 2/13 on the other side are therefore to be seen in conjunction. The broad interpretation of essentially biological processes as being excluded from patentability, from an economic point of view, must be synchronized with the patentability of plants obtained by such processes. If, however, patentability of such plants is denied, the notion of biological processes should be narrowed.

This is in accordance with the existing Rule 26(5) EPC stating that a "process for the production of plants or animals is essentially biological if it consists entirely of natural phenomena such as crossing or selection." Rule 28(2) EPC therefore is based on a different definition for essentially biological processes than what has been used by the EU Commission to come to their conclusion in the Notice.

This has also been mentioned during the proceedings in respect of decision T 1063/18 (Reasons, point 42):

"As the board is persuaded by the appellant's first line of argument, set out in section IX(a) above, the issue of whether or not the Notice adopted a narrow interpretation of essentially biological processes or referred to an alleged broader interpretation of essentially biological processes as defined in decisions G 2/07 and G 1/08 (see section IX(b), above) need not be considered."

Although G 2/07 (Reasons, point 6.1.3.) states that any "attempt to define a reliable literal meaning for the term 'essentially biological' process appears futile" there should be a reconsideration in the light of the subsequent developments regarding the patentability of plants obtained by such processes.

The function of the exclusion of essentially biological processes is to be seen as a clarification of the technicality requirement including repeatability. It belongs therefore functionally rather to Art 52(2) EPC than to Art 53 EPC. Other than with plants as products there was never a problem of double protection since plant breeder's rights do not encompass processes. However, as shown above, it could be seen as a functional complement to the exception of plant varieties, preventing circumventions while at the same time respecting the general patentability of

inventions in all fields of technology and the need for an effective protection system in the area of plant innovations (Art 27(1) and (3) TRIPS).

This problem has been analyzed in detail in G 2/07 (Reasons, point 6.4.2.3.):

“In the legal literature and in the jurisprudence it is often stated that at the time the SPC was drafted it was generally felt that processes for the production of higher life forms and the products thereof involved special problems concerning the criteria for patentability (G 1/98, loc.cit., point 3.4 of the Reasons). This view, however, does not come out explicitly in the preparatory documents. Furthermore, it does not explain why such inventions were to be excluded from patentability since they would not have been patentable anyway, for lack of reproducibility, or even, as the referring Board has expressed it in T 83/05, for lack of a technical teaching.”

However, the historic development of the legal rule and its disputed function should not hinder a modern interpretation taking into account its economic effects as well as its interplay with other legal rules.

We therefore hold that from a functional point of view the notion of essentially biological processes should be reinterpreted and that a narrower definition should be adopted as set out in Art 2(2) Biotech-Directive and Rule 26(5) EPC.

Such an interpretation would also be in line with the problem of software-implemented inventions. According to the COMVIK-approach (Examination Guidelines Part G –Chapter VII-5.4, cf. T 641/100), inventions containing technical and non-technical elements are regarded as “legitimate” technical inventions. However, when assessing the inventive step of such a mixed-type invention, only those features which contribute to the technical character of the invention are taken into account. (Examination Guidelines Part G –Chapter VII-5.4)