

REFERENCED DECISIONS

EPO

G 005/83 (EISAI) <http://legal.european-patent-office.org/dg3/biblio/g830005ep1.htm>
G 0002/88 (MOBIL OIL II) <http://legal.european-patent-office.org/dg3/biblio/g880002ep1.htm>
G 0001/95 (DE LA RUE) <http://legal.european-patent-office.org/dg3/biblio/g950001ex1.pdf>
G 0001/98 (NOVARTIS II) <http://legal.european-patent-office.org/dg3/pdf/g980001ex1.pdf>
G 0003/98 (UNIVERSITY PATENTS) <http://legal.european-patent-office.org/dg3/pdf/g980003ext1.pdf>
G 0001/03 (PPG) <http://legal.european-patent-office.org/dg3/pdf/g030001ex1.pdf>
G 0001/04 (Diagnostic methods) <http://legal.european-patent-office.org/dg3/pdf/g040001ex1.pdf>

T 0208/84 (VICOM) <http://legal.european-patent-office.org/dg3/biblio/t840208ep1.htm>
T 0022/85 (IBM) <http://legal.european-patent-office.org/dg3/biblio/t850022ep1.htm>
T 0769/92 (SOHEI) <http://legal.european-patent-office.org/dg3/biblio/t920769ep1.htm>
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T 0641/00 (COMVIK) <http://legal.european-patent-office.org/dg3/pdf/t000641ex1.pdf>
T 0619/02 (QUEST INTERNATIONAL) <http://legal.european-patent-office.org/dg3/pdf/t020619ex1.pdf>
T 0764/02 (ONLINE RESOURCES) <http://legal.european-patent-office.org/dg3/pdf/t020764eu1.pdf>
T 0172/03 (RICOH) <http://legal.european-patent-office.org/dg3/pdf/t030172eu1.pdf>
T 0258/03 (HITACHI) <http://legal.european-patent-office.org/dg3/pdf/t030258ep1.pdf>
T 0531/03 (CATALINA) <http://legal.european-patent-office.org/dg3/pdf/t030531eu1.pdf>
T 0930/05 (XPRT) <http://legal.european-patent-office.org/dg3/pdf/t050930du1.pdf>

NATIONAL COURTS

"Electronic Banking" - Judgement of the German Federal Court of Justice X ZB 20/03 – elektronischer Zahlungsverkehr - of 24 May 2004
<http://www.jetro.de/j/patent/2004/Aug/040524BGH.pdf>

"Aerotel/Macrossan" – Judgement of the England and Wales Court of Appeal in re Aerotel Ltd V Telco Holdings Ltd (and others) and Macrossan's Patent Application [2006] EWCA Civ 1371
<http://www.baillii.org/ew/cases/EWCA/Civ/2006/1371.html>

"Genentech" – Judgement of the England and Wales Court of Appeal in re Genentech Inc.'s Patent [1989] R.P.C. 147

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What is an Invention? – Requirement for "technical character" reviewed

The European Patent Convention (EPC) explicitly requires that an invention must have novelty, inventive step and industrial applicability. However, to qualify for protection by a European patent, there is an implicit requirement that an invention must also have an element of "technicality" or "technical character".

In a recent decision - T0154/04 - the EPO Board of Appeal responsible for many decisions on software/business method related "inventions" reviewed in detail the test for "technical character" as evolved to date. The Board also considered the way in which claims involving both technical and non-technical features are to be assessed for novelty and inventive step. Finally, the Board rejected the so-called "contribution approach" to assessment of "technical character" which was effectively applied by the English Court of Appeal in its recent Aerotel/Macrossan decision.

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The Board of Appeal summarized the principles which apply under the EPC in the following terms:

The Board of Appeal summarized the principles which apply under the EPC in the following terms:

- (A) Article 52(1) EPC sets out four requirements to be fulfilled by a patentable invention: there must be an invention, and if there is an invention, it must satisfy the requirements of novelty, inventive step, and industrial applicability.
- (B) Having technical character is an implicit requisite of an "invention" within the meaning of Article 52(1) EPC (requirement of "technicality").
- (C) Article 52(2) EPC does not exclude from patentability any subject-matter or activity having technical character, even if it is related to the items listed in this provision since these items are only excluded "as such" (Article 52(3) EPC).
- (D) The four requirements invention, novelty, inventive step, and susceptibility of industrial application are essentially separate and independent criteria of patentability, which may give rise to concurrent objections. Novelty, in particular, is not a requisite of an invention within the meaning of Article 52(1) EPC, but a separate requirement of patentability.
- (E) For examining patentability of an invention in respect of a claim, the claim must be construed to determine the technical features of the invention, i.e. the features which contribute to the technical character of the invention.
- (F) It is legitimate to have a mix of technical and "non-technical" features appearing in a claim, in which the non-technical features may even form a dominating part of the claimed subject-matter. Novelty and inventive step, however, can be based only on technical features, which thus have to be clearly defined in the claim. Non-technical features, to the extent that they do not interact with the technical subject-matter of the claim for solving a technical problem, i.e. non-technical features "as such", do not provide a technical contribution to the prior art and are thus ignored in assessing novelty and inventive step.
- (G) For the purpose of the problem-and-solution approach, the problem must be a technical problem which the skilled person in the particular technical field might be asked to solve at the relevant priority date. The technical problem may be formulated using an aim to be achieved in a non-technical field, and which is thus not part of the technical contribution provided by the invention to the prior art. This may be done in particular to define a constraint that has to be met (even if the aim stems from an *a posteriori* knowledge of the invention).

- **Examination for “technical character” – strictly separate from examination of other requirements of patentability**

In its decision (T0154/04, Method of estimating product distribution/DUNS LICENSING ASSOCIATES, L.P) the Board emphasised that Article 52 EPC imposes four separate requirements on claimed subject-matter in order for it to be patentable under the EPC; namely (a) it must constitute an “invention”, and this invention must (b) be new, (c) involve an inventive step and (d) be susceptible of industrial applicability. In support the Board cited, among other things, previous Enlarged Board of Appeal decisions G2/88 (Friction reducing additive/MOBIL OIL II) and G1/95 (Fresh Grounds of Opposition/DE LA RUE).

In order to satisfy the first requirement, that of being an “invention”, the subject-matter must have “technical character”. In this regard, the Board noted that Article 52 EPC provides a non-exhaustive list of items which are not inventions per se, and that in order for it to be possible to make additions to the list there must be a common criterion linking the items in the list. The Board stated that this criterion is a substantial lack of technical character, following (among others) previous decisions T22/85 (Document abstracting and retrieving/IBM), T931/95 (Controlling Pension Benefits System/PBS PARTNERSHIP) and T930/05 (Modellieren eines Prozessnetzwerkes/XPERT). Hence, subject-matter lacking technical character is not an invention under Article 52 EPC.

On the other hand, any subject-matter having “technical character” is an invention in the sense of Article 52 EPC, even if it relates to the items listed in Article 52(2) EPC, because such items are only excluded “as such” under Article 52(3) EPC, i.e. only to the extent that they are devoid of technical character. The Board stated that “By having technical character, any product, method etc., even if formally relating to the list enumerated in paragraph 2, is not excluded from patentability under paragraphs 2 and 3 of Article 52 EPC”.

The Board continued, following T1002/92 (Queueing System/PETTERSON), by stating that “The examination whether there is an invention within the meaning of Article 52(1) to (3) EPC should hence be strictly separated from and not mixed up with the other three patentability requirements referred to in Article 52(1) EPC”. In support of this, the Board also cited national Court decisions (UK – “Genentech”, Germany – “Electronic Banking”).

The Board thus considered the requirement of subject-matter being an invention to be absolute and in no way dependent on the prior art, the answer as to whether or not it is an invention being dependent on “the inherent character of the claimed subject-matter”. This approach to assessing the requirement of “invention” has evolved over the years and is currently followed by the Boards; see for example T258/03 (Auction method/HITACHI).

- **Claims having a mixture of technical and non-technical features – permissible, but novelty and inventive step can only be based on technical features**

The Board further considered how novelty and inventive step are to be assessed for a claim containing a mixture of technical and non-technical features. The Board stated that “novelty and inventive step can only be established on the basis of the technical features of the invention”. In support of this, the Board cited EBA decision G2/88 (Friction reducing additive/MOBIL OIL II) where the Enlarged Board stated “A claimed invention lacks novelty unless it includes at least one essential technical feature which distinguishes it from the state of the art. When deciding upon the novelty of a claim, a basic initial consideration is therefore to construe the claim in order to determine its technical features”.

The Board continued by saying, “From this distinction between the technical features and non-technical features . . . it must be inferred that non-technical features to the extent that they do not interact with technical features to produce a technical effect cannot establish novelty or inventive step”. Hence, non-technical features can only be used as a basis for distinguishing a claim from the prior art if they interact with technical elements so as to produce a technical effect, by their application for the technical solution of a technical problem. Non-technical features which do not contribute towards such a technical effect cannot provide a basis for establishing novelty or inventive step.

The Board considered how the problem-and-solution approach for assessing inventive step is applied to subject-matter containing both technical and non-technical features. Following T641/00 (Two Identities/COMVIK), the Board stated that the problem must be a technical problem. The Board noted, however, that it is difficult to define the technical problem if

the underlying concept of the core of the claimed subject-matter belongs outside of any technological field. The Board stated that attempting to define the technical problem without reference to the non-technical part of the claimed subject-matter, if at all possible, would usually result in an unintelligible definition or a contrived statement which fails to adequately reflect the actual technical contribution made by the subject-matter to the prior art.

Accordingly, the Board followed T641/00 by holding that it is acceptable to allow “an aim to be achieved in a non-technical field to appear in the formulation of the problem as part of the framework of the technical problem that is to be solved, in particular as a constraint that is to be met”. Further, the Board stated that “it is irrelevant whether such a non-technical aim was known before the priority date of the application, or not”, on the basis that only technical features and aspects of a claimed invention should be taken into account in assessing inventive step because the innovation must reside in a technical field and not in a non-patentable field. In this respect, the Board followed decisions T531/03 (Discount Certificates/CATALINA) and T619/02 (Odour selection/QUEST INTERNATIONAL).

- **The “contribution approach” of Aerotel/Macrossan - rejected**

In addition to its detailed explanation of the evolved approach of the Boards of Appeal to interpreting and applying Articles 52, 54 and 56 EPC, the Board also commented at length on the approach recently taken by the English Court of Appeal in Aerotel/Macrossan. This is the so-called “contribution” or “technical effect” approach, which assesses the claimed subject-matter in relation to the prior art when deciding whether it constitutes an “invention” (i.e. has technical character). Thus, contrary to the approach endorsed by the EPO Boards of Appeal in which whether the claimed subject-matter is an “invention” is considered separately from issues of novelty and inventive step, in the “contribution approach” the novel features of the subject-matter are first determined and the contribution of the “novel” features over the prior art is then assessed for technical character. This “contribution approach”, which was used by EPO Boards of Appeal a decade ago, was rejected.

In particular, the Board of Appeal found that the so called “contribution approach” was incorrect because the prior art is defined in Articles 54 and 56 EPC solely in relation to novelty and inventive step, there being no Article or Rule in the EPC defining how prior art is to be applied in the context of Article 52 EPC. The Board said “it is simply inconceivable that the contracting states missed such an important point in the conclusion of the Convention. Hence, there are convincing reasons why the “contribution” or “technical effect” approach should be abandoned”.

The Board argued further that the contribution approach is wrong in presupposing that (quoting from Aerotel/Macrossan) “novel and inventive purely excluded matter does not count as a ‘technical contribution’”. The Board opined that this has no basis in the EPC and contravenes conventional patentability criteria. In particular, the Board argued, as outlined above, that non-technical features could contribute to the technical character of a claim if they interact with technical elements to produce a technical effect.

What is an Invention?

- An invention must have an element of “technical character”
- Examination for “technical character” of an invention is strictly separate from examination of the other requirements (novelty, inventive step, industrial applicability) for patentability
- Claims containing a mixture of technical and non-technical features are permissible, but novelty and inventive step can only be established on the basis of the technical features
- The “contribution approach” of Aerotel/Macrossan was rejected as lacking basis in the EPC