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Learning path for patent examiners

Novelty:
Advanced level

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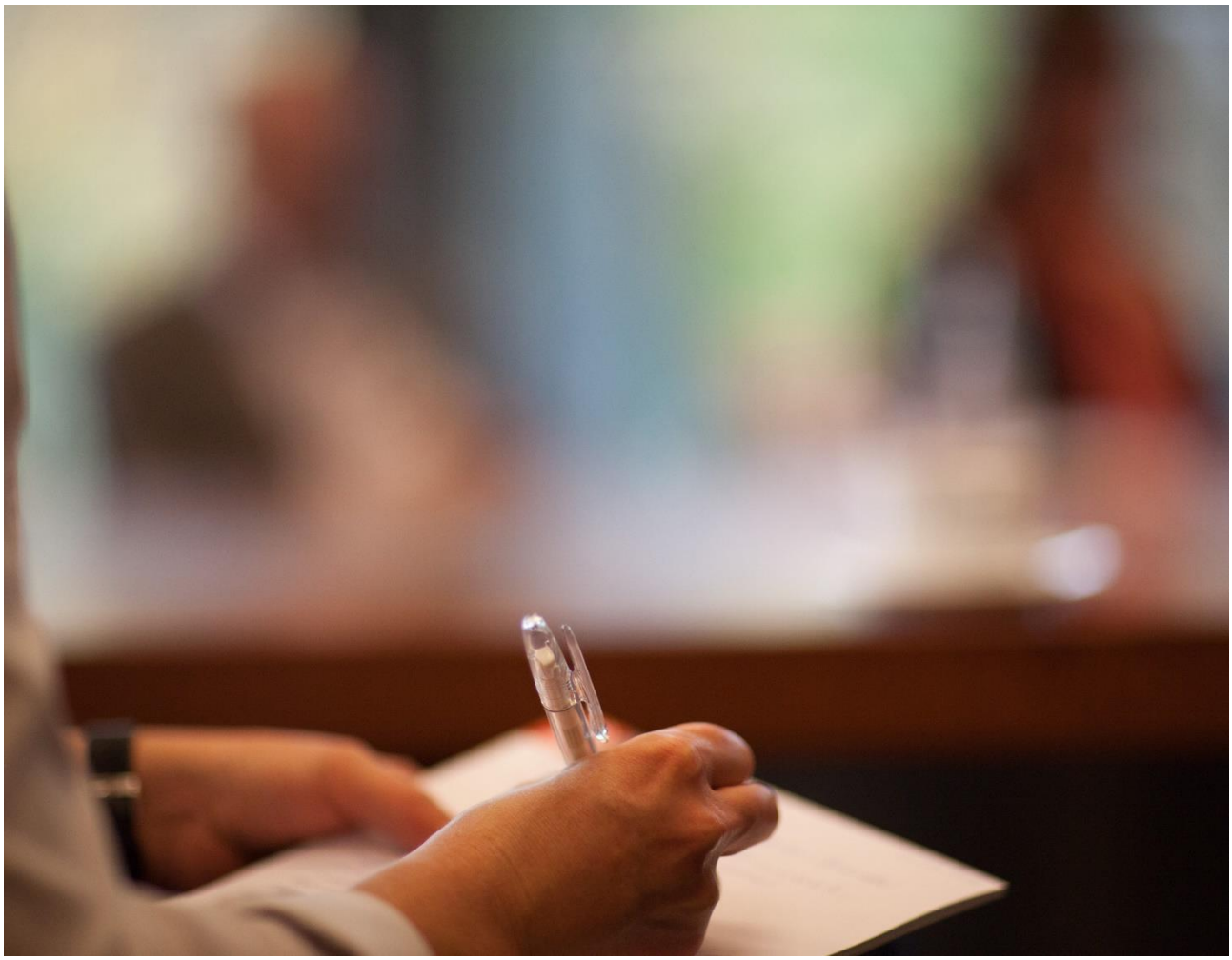

Introduction

This publication, "Novelty, Advanced level", is part of the "Learning path for patent examiners" series edited and published by the European Patent Academy. The series is intended for patent examiners at national patent offices who are taking part in training organised by the European Patent Office (EPO). It is also freely available to the public for independent learning.

Topics covered include novelty, inventive step, clarity, unity of invention, sufficiency of disclosure, amendments and search. Also addressed are patenting issues specific to certain technical fields:

- patentability exceptions and exclusions in biotechnology
- assessment of novelty, inventive step, clarity, sufficiency of disclosure and unity of invention for chemical inventions
- the patentability of computer-implemented inventions, business methods, game rules, mathematics and its applications, presentations of information, graphical user interfaces and programs for computers
- claim formulation for computer-implemented inventions

Each publication focuses on one topic at entry, intermediate or advanced level. The explanations and examples are based on the European Patent Convention, the Guidelines for Examination in the EPO and selected decisions of the EPO's boards of appeal. References are made to the Patent Cooperation Treaty and its Regulations whenever appropriate.

The series will be revised annually to ensure it remains up to date.

Disclaimer

All references to natural persons are to be understood as applying to all genders.

Contents

Legal references

1. Learning objectives

Participants to this course will learn:

- The definition of industry standards and how to treat them when assessing novelty
- The concept of an enabling disclosure
- How to deal with prior use
- How to recognise and deal with selection inventions
- How to deal with first and second medical use

2. Standards as state of the art

In many technical sectors, the relevant stakeholders form bodies, e.g. federation of car manufacturers, society of mechanical engineers or association of semiconductor chip manufacturers. These are given the power to develop standards that the industry then follows.

The question is whether these standards form part of the state of the art.

The answer is determined according to the usual criteria of availability to the public and time. In other words, if the standards are publicly available, they form part of the state of the art from the date they were published.

Certain industry standards are available **only** to the relevant stakeholders. They are protected by non-disclosure agreements and as such remain unavailable to the general public. In these cases, they are **not** part of the state of the art.

> An example of these relates to private standards consortia (e.g. in the field of CD-ROM, DVD and Blu-ray discs), which do not publish the final standards but make them available to the interested circles subject to acceptance of a non-disclosure agreement (categorically forbidding the recipients of the documents to disclose their content).

Therefore, EPO practice is to deal with industry standards on a case-by-case basis following the usual rules of availability to the public.

Legal references:
GL G-IV, 7.6

3. Enabling disclosure

When assessing novelty and comparing an invention with a prior-art document, it is important to ascertain if the document makes a disclosure in an enabling way. That is to say, does the document contain enough information for a general practitioner in the field (the "skilled person") who is aware of all the developments in the field but does not possess any inventive skill to reproduce the invention?

In other words, care must be taken to ensure that the prior-art document does not merely state what an invention is, but also contains enough detail for the invention to be carried out by someone with average knowledge in the field, without requiring undue burden in terms of further searches,

experiments, etc. It is also important to consider that the required knowledge to carry out the invention must be available **at the time** the document is published, **not later**.

Examples

1.A document discloses a chemical compound (identified by name or by structural formula), indicating that the compound may be produced by a process defined in the document itself. The document, however, does not indicate how to obtain the starting materials and/or reagents used in the process. If the skilled person cannot obtain these starting materials or reagents on the basis of common general knowledge (e.g. from textbooks), the document is insufficiently disclosed with respect to those materials and/or reagents. Hence, it is not considered to belong to the state of the art.

2.An application filed in 2018 claims a system for monitoring a power plant that makes use of the internet to transfer data about the plant to a central unit. A prior-art document from 1979 discloses the same monitoring system and states that all the standard means for transferring information to a central unit could be used. Is the invention novel over the prior art?

Yes, as the internet did not exist in 1979.

Legal references:
GL G-IV, 2

4. Examining prior use

- Assessing novelty in cases of prior use requires extra care and becomes particularly relevant during the examination phase of an application.
- First and foremost, all relevant information, e.g. documents confirming a sale, an exhibition at a conference or affidavits confirming prior use, should be gathered and its relevance ascertained.
- Particular attention should then be paid to the timing and what was specifically disclosed by the prior use.
- If the examiner and/or examining division is of the opinion that the prior use had disclosed the invention, and specifically that it was an enabling disclosure as defined above, an objection for lack of novelty should be raised and communicated to the applicant.
- Applicants often dispute prior use, in which case further details and evidence may have to be taken, e.g. hearing a witness.

Legal references:
Art. 117 EPC, GL G-IV, 7.2

5. Oral disclosures

Another way of disclosing information is orally. This can take various forms such as a lecture, a casual conversation, a presentation at a conference, a broadcast or a tape recording.

To determine if an oral disclosure is part of the state of the art, the usual two pillars of availability to the general public and happening before the filing/priority date apply.

As oral descriptions lend themselves to dispute about their actual content, especially if there is no recording, the standard of proof for ascertaining the content of an oral disclosure is high. Whether the amount of evidence provided is sufficient to establish the content of the oral disclosure under this standard of proof must be evaluated on a case-by-case basis and depends on the quality of the evidence in each case.

As a principle, however, evidence from the lecturer alone usually does not provide a sufficient basis for determining the content of the oral disclosure.

Legal references:
GL G-IV, 7.3; GL B-VI, 2

6. Selection inventions

At the EPO, selections from several lists of a certain length are handled in line with the "two-lists" principle. In other words, if an invention selects a specific element from a single list, the selection is deemed **not novel**. Selections from two or more lists, however, are deemed novel.

A special case is when an invention claims a sub-range of a known range, i.e. a "selection invention". A typical example would be an invention in which it was found that, for a specific narrow range, there is a resonance or an expected improvement in performance. In that case, provided the range in question is narrow compared with that known from the state of the art and is sufficiently far removed from specific examples and the end-points in the prior art, then novelty can be established. The concept of "narrow" is determined on a case-by-case basis.

Examples

A) The prior art discloses a fork that can have three, four or five prongs. The invention claims a fork with four prongs. Is the invention novel? Selection from a single list à **No**.

B) The prior art discloses a fork that can have three to seven prongs, which in turn can be made of silver, copper, steel or aluminium. The invention claims a fork with four prongs made of silver. Is the invention novel? Selection from two lists à **Yes**.

C) The invention claims: "A fork with three prongs made of a steel alloy such that the thermal conductivity falls between 45.9 and 46.1 W/mK to optimise the cooling of meat when eating". The prior art discloses forks with three prongs made of a steel alloy with thermal conductivity ranging from 44 to 48 W/mK.

Is the claim novel versus the prior art?

At first glance, the prior art discloses many values within the claimed range, so the claim does not appear to be novel. However, the claimed range is "narrow" (0.2 W/mK versus 4 W/mK) and has an unexpected advantage.

Does the prior art have specific embodiments falling within the claimed range, e.g. at 46.0 W/mK? If yes, then the claim is still not novel. Otherwise, the claim recites a selection invention and is novel.

Legal references:
GL G-VI, 7

7. First and second medical use

In general, a product has to be novel in order to be granted. In the medical field, though, there are two exceptions to this rule enshrined in Article 54(4) and (5) EPC.

'It is possible to obtain patent protection for a substance that is known, provided its use in medicine is new/not known. The correct formulation in this case would be, for example, "Substance X for use as a medicament". Likewise, "Substance X for use in treating disease Y" would also be acceptable wording if substance X is not known in medicine.

A known product can be novel if used in a new, previously unknown context.

In these cases, the wording of the claims must be given careful consideration and must strictly follow the wording of the examples given above and specified by the Guidelines for Examination.

Similarly if a substance is known to have been used in medical applications, it can still be deemed novel if another use in the medical field is found (the "second medical use").

One famous case is that of Viagra. Pfizer originally invented the compound to treat heart conditions and patented it as a product. It was then discovered that the compound had effects on erectile dysfunction, so Pfizer filed a patent application claiming the use of the compound for erectile dysfunctions. It was deemed novel.

Examples

A claim worded as follows (as in the case of Viagra):

"The use of a compound of formula … (e.g. a relevant chemical formula, like the one for the compound of Viagra) … for the curative or prophylactic treatment of erectile dysfunction."

Even if the compound is known, or indeed even if its use in medicine is known for treating another condition, its use for a **new** medical application can be novel.

The EPO always held the application for Viagra as a medical use for erectile dysfunction to be novel. The application was ultimately rejected on appeal for lack of inventive step, but its novelty was never questioned.

Legal references:

Art. 54(4) EPC, Art. 54(5) EPC, GL G-VI, 6.1; GL G-VI, 6.2

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