

*ARTICLE:*

**NOVELTY AND NON-OBVIOUSNESS –  
THE RELEVANT PRIOR ART**

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This analysis is focused on the European Patent Convention (EPC), with references to some European patent laws.

**I. Novelty and non-obviousness**

To understand the relationship between novelty and non-obviousness (inventive level), the starting point should be a definition of the concepts. Some elementary and imprecise notions can be assumed at this stage, without yet attempting to examine the matter in depth.

It can be said that an invention is **new** (novel) when it differs from the prior art. Not much difference is required; a small difference is sufficient (how much difference will be seen later on). Simply, an invention A' is new when is different from the prior art A.  $A' \neq A$ .

It can be said that an invention is **non-obvious** (or possesses inventive level) when it is sufficiently different from the prior art. A certain degree of difference is required; a simple difference is not sufficient (how much difference will be seen later on). Therefore, an invention A' is non-obvious when it is significantly different from the prior art A ( $A' \neq A$ ).

At this point, one might wonder whether the concept of novelty should really be maintained and investigated. In fact, since a simple novelty is not sufficient, and a qualified or enhanced novelty (non-obviousness) is necessary, why should one try to determine the smaller concept embodied in the broader one?<sup>1</sup>

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<sup>1</sup> See M. Franzosi, *L'invenzione*, Milan, Giuffrè', 1970, at 60. And see G. Paterson, *The European Patent System*, London, Sweet and Maxwell, 1992, at 370: "It can be questioned whether a requirement of novelty in patent law is really necessary. Since subject matter, which does not involve an inventive step, is not patentable, it could be considered that a single requirement of inventive step would be sufficient.... There is of course a basic contradiction in the idea of refusing patentability for a claimed invention on the ground of lack of novelty in the light of a particular disclosure, if it would have required an inventive step to derive the claimed invention from such disclosure."

There is, of course, an immediate answer to this question. Article 56 of the EPC states that documents mentioned under Art. 54 (3) (prior applications that mature into patents) are not taken into consideration in the evaluation of inventive activity. They are only considered in evaluating novelty. So, at least for this purpose, the requirement of novelty has to be maintained.

But, as we will see, there is a more fundamental reason to distinguish between novelty and inventive level. This reason may be better grasped by way of intuition than clearly understood. The reason is that prior art has to be distinguished into four classes. All four are relevant for novelty, but only the first and a part of the second for non-obviousness.

## 2. Novelty and similar concepts

First, let us try to better understand the meaning of **novelty**. I believe that several concepts in the patent law should be put in relation, since they have common elements.<sup>2</sup>

i) The first concept is **sufficiency of description**. An invention is described in a sufficient manner even if all the technical details are not expressed, provided that the expert may complete the description with his own technical preparation (*i.e.*, the common general knowledge available to the expert in the pertinent field of technology), and reproduce the invention without undue burden.<sup>3</sup>

What “undue burden” means cannot be defined clearly. It does not mean that the invention should be reproduced at the first trial, without errors. A certain possibility of experiments, of trial and error, is admissible. It is essential that the result can be reasonably foreseen and obtained with great statistic probability,<sup>4</sup> or “on the basis of the available evidence having regard to the balance of probabilities in each individual case”.<sup>5</sup>

Repeatability does not need to be exact. Even if the applicant does not know how the desired result is arrived at, the description is sufficient if the result can be attained anyway.<sup>6</sup>

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<sup>2</sup> For the opinion that there are common elements between amendments, priority and novelty – in the sense that “a uniform notion of disclosure as well as identical requirements of disclosure are to be assumed” – see B. Hansen, F. Hirsch, *Protecting Inventions in Chemistry*, Weinheim, Wiley-VCH1997, at 49. See *Etikettiermaschine*, X ZB 1981, GRUR 1981, at 812. In the Guidelines, sect. C -V, 2.4, it is indicated that the basic test to determine whether a claim is entitled to the date of a priority document is the same as the test to decide whether an amendment to the application is admissible (art. 123(2) EPC); and this is the same as the test for novelty. In a decision of the Technical Board of Appeal of the European Patent Office it was held that the requirements are the same for novelty and for sufficiency of disclosure. *ICI / Pyridine herbicides*, T 206/83, OJ (Official Journal) 1987, at 5.

<sup>3</sup> *Redox catalyst / Air product*, T 171/84, OJ 1986, at 95.

<sup>4</sup> *Stable bleach / Unilever*, T 226/85 OJ 1988, at 336; Hansen Hirsch, *supra* note 2, at 52.

<sup>5</sup> *Fuel oil / Exxon*, T 409/91 OJ 1994, at 653.

<sup>6</sup> *Preprothaumatin / Unilever*, T 281/86, OJ 1989, at 202.

Therefore, it is not necessary that a photographic identity exist between the description and the steps followed by the expert in putting the invention into practice. The expert may implement the description by completing it with common general knowledge.

ii) The second concept is applied to determine the scope of the patent from a literal point of view, *i.e.*, the **literal scope** of the patent protection. A patent covers not only what can be photographically superimposed on the application, but also some variations, provided that the expert can easily identify said variations as implied in the original application. He proceeds to an integration of the application, applying common general knowledge. Clear teachings that are given implicitly are counted with the disclosure.<sup>7</sup> Included in the literal scope are those equivalents which come immediately to the mind of the expert, without any research or even consideration, by reading the description. An equivalent is considered immediate when the expert, possessing the common general knowledge pertaining to his art, sees no difference between the described embodiment and the equivalent one.<sup>8</sup>

iii) The third concept is applied in order to establish the allowability of an **amendment** presented during the examination (or of a divisional application, when it results in an amendment). Amendments (and divisionals) are possible even if not photographically included in the original application, if the expert can easily identify the variation as implied in the original application. Here again, the expert completes the application with common general knowledge.<sup>9</sup>

iv) The fourth concept is the one applied to allow the right of **priority**. A photographic identity is not required, and the application may somehow diverge from the priority document – without loss of priority – provided that the expert can recognize the application as implied in the priority documents. Once again, the expert proceeds on the basis of the common general knowledge.<sup>10</sup>

v) The fifth concept is that which applies the theory of **equivalence** in case of infringement. Perhaps not all equivalents are to be considered with the same yardstick. It is my

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<sup>7</sup> B. Hansen- F. Hirsch, *supra* note 2, at 96.

<sup>8</sup> For German cases see 16 W 11.81 of 10.09.82 and F. Hirsch, GRUR 1984, at 243. In *Elektrische Steckverbindung* X ZB 17.01.95, GRUR 1995, at 330, IIC 1996, at 541 the following formula was used for a similar but not identical problem: “Everything is deemed disclosed...which is almost impossible not to deduce or that can be read into the disclosure immediately without further effort.”

<sup>9</sup> *Shell / lead alloys*, T 201/83: “The test for compliance with Art. 123(2) EPC (allowable amendments) is basically a novelty test; *i.e.*, no new subject matter must be generated by the amendment. The requirement is not satisfied unless the skilled man could directly recognize (the amendment as a combination of features available from the document). But for the amendment it is also necessary that the feature that is being introduced be clearly attributable to the invention and was recognizable as being an essential integer of it.” B. Hansen, F. Hirsch, *supra* note 2, at 49. In fact in order to obtain patent protection it is not sufficient that an invention is made. It is also necessary that the inventor recognizes the invention and applies for specific protection of the technical solution.

<sup>10</sup> B. Hansen- F. Hirsch, *supra* note 2, at 186.

feeling that only immediate equivalents (*glatte äquivalenten*, of the old German practice<sup>11</sup>) are based on a concept similar to the one applied in this paragraph. Solutions which are not mentioned in the claim, but which the expert immediately understands – on the basis of common general knowledge, without need of research or consideration – as being equivalent (*i.e.*, unsubstantial variations of the solution indicated in the claim), are considered infringements. Here the expert does not look at a photographic identity between the claim and the infringement, but accepts an integration of the claim which includes what can be considered substantially similar on the basis of the common general knowledge. This concept of equivalence coincides with – and simply results in a different formulation of – the concept of literal scope given before.

vi) The sixth is the concept of **novelty**. A technical solution lacks novelty not only when it is photographically identical to a solution contained in the prior art, but also when it is considered by the expert, on the basis of common general knowledge, as an insubstantial variation. A logical understanding has to be applied; a technical feature should not be considered new simply because it was not described with the same words.<sup>12</sup>

### 3. Novelty as technical identity

For the moment, the preceding exposition is sufficient to demonstrate the substantial identity, or great affinity, of these various concepts. Technical and not photographic identity, as established by the skilled technician on the basis of the common general knowledge, is the underlying concept.

Nevertheless, it should be noted that the concept of novelty in the practice of the European Patent Office is narrower than the one accepted by the German Patent Office. In fact, the Guidelines state that “when considering novelty, it is not correct to interpret the teaching of a document as embracing well-known equivalents which are not disclosed in the document: this is a matter for obviousness.”<sup>13</sup> This statement apparently contradicts principles that are also generally accepted by the European Patent Office, such as: “the concept of novelty must not be given such a narrow interpretation that only what has already been described in the same terms is prejudicial to it”;<sup>14</sup> and, “since novelty is an absolute concept, a definition of an invention which differs only in its wording is insufficient”.<sup>15</sup>

The contradiction can (perhaps) be resolved by taking into consideration the technical contribution. Equivalents leading to a different technical contribution cannot be considered

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<sup>11</sup> See E. Reimer, *Patentgesetz und Gebrauchsmustergesetz*, Muenchen-Berlin, Heymans, 2. Auf. 1958, § 1, Rdn. 39; G. Benkard, *Patentgesetz*, Muenchen, Beck, 9 Auf. 1993, § 3, Rdn. 24, § 14, Rdn. 121, 165.

<sup>12</sup> *Hoechst / Trichloroformates*, T 198/84: “A definition of an invention which differs only in wording is insufficient; what is to be established...is whether the state of the art is likely to reveal the content of the invention’s subject matter to the skilled person in a technical meaning.” OJ 1985, at 209.

<sup>13</sup> Guideline C-IV, 7.2.

<sup>14</sup> *Bayer / Diastomers*, T12/81, OJ 1982, at 296.

<sup>15</sup> *Hoechst / Trichloroformates*, T 198/84, OJ 1985, at 209.

from the point of view of novelty; they only have to be evaluated from the point of view of obviousness. It is a fact, anyway, that the evaluation of novelty made by the European Patent Office tends to be quite generous, in the sense that a limited difference is sufficient to establish novelty. In contrast, the German practice would also include the non-immediate equivalents in the evaluation of novelty.

#### 4. Four classes of prior art for novelty

As stated above, novelty means difference from the **prior art**. But what is prior art? There is a tendency to consider “the prior art” as a single and uniform notion. It is not so. Several distinctions have to be made. Here, even if it is disputed whether one should construe an ideal figure of the average skilled technician, intended to be as close as possible to the real expert practicing the field in question,<sup>16</sup> I think it useful, at least for purposes of this demonstration, to try to imagine the ideal average technician, and distinguish the prior art in various classes or groups according to his command of various pieces of information on the pertinent technology.

i) The first group of prior art is the **common general knowledge** available to the expert. If, for example, an invention is in the field of production of integrated circuits, the knowledge should be that which is available to the expert in that type of production;<sup>17</sup> if it is in the field of use of integrated circuits for the production of monitors, the knowledge should be in that one. In some specialized and advanced fields, the expert should be not an ideal single physical person, but a team of persons.<sup>18</sup> It should be the knowledge of the good expert, not the careless or uneducated one.<sup>19</sup>

The common general knowledge is mostly contained in textbooks and leading technical articles.<sup>20</sup> The European Board of Appeal has stated:

It is normally accepted that common general knowledge is represented by basic handbooks and textbooks on the subject in question. The skilled person could well be expected to consult these to obtain clear advice as to what to do in the circumstance, since the skill of such persons not only includes knowledge about particular basic prior art but also knowledge as to where to find such information. Such books may indeed refer him to articles describing specifically how to act or at least giving a fairly generally applicable method for the purpose, which can be used without any doubt.<sup>21</sup>

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<sup>16</sup> *Benzodioxane Derivatives / Eisai*, T 334/92, 23.03.94, OJ Spec. Ed. 1995, at 38.

<sup>17</sup> See *Elektromagnetische Rührvorrichtung*, BGH GRUR 1959, at 532, 536.

<sup>18</sup> See *Thrombozyten-Zählung*, X ZR 19.12.85, GRUR 1986, at 372.

<sup>19</sup> See R. Blum, *Das Kriterium des “gut ausgebildeten Fachmannes,”* GRUR Int. 1956, at 199.

<sup>20</sup> See also H. Laddie J., in *Reychem. Corp's Patents*, 1998 RPC 31.

<sup>21</sup> *ICI / Pyridine herbicides*, T 206/83, OJ 1987, at 5.

Patent specifications are not part of the common general knowledge, unless perhaps quoted in textbooks or in an important publication. A careful definition of common general knowledge was given by Lord Justice Sachs:

The common general knowledge imputed (to the skilled technician) must of course be carefully distinguished from what in patent law is regarded as public knowledge.... Common general knowledge is a different concept derived from common sense approach to the practical question of what would in fact be known to an appropriately skilled addressee – the sort of man, good at his job, that could be found in real life. The two classes of documents which call for consideration in relation to common general knowledge...[are] individual patent specifications and widely read publications. As to the former, it is clear that individual patent specifications and their content do not normally form part of the relevant common general knowledge, though there may be specifications which are so well known amongst those versed in the art that that upon evidence of that state of affairs they form part of such knowledge, and also there may occasionally be particular industries...in which the evidence may show that all specifications form part of the relevant knowledge.<sup>22</sup>

As regards scientific papers generally, Luxmoore says:

A piece of particular knowledge as disclosed in a scientific paper does not become common general knowledge merely because it is widely read, and still less because it is widely circulated, (but) when it is generally known and accepted without question by the bulk of those who are engaged in the particular art; in other words, when it becomes part of their common stock of knowledge relating to the art.

...We accept these passages as correctly stating in general the law on this point, though reserving for further consideration whether the words “accepted without question” may not be putting the position rather high...we are disposed to substitute the words “generally regarded” as a good basis for further action...<sup>23</sup>

And Lord Justice Aldous adds:

It has never been easy to differentiate between common general knowledge and that which is known by some. It has become particularly difficult with the modern ability to circulate and retrieve information. Employees of some companies, with the use of libraries and patent departments, will become aware of information soon after it is published in a whole variety of documents; whereas others, without such advantages, may never do so until that information is accepted generally and put into practice. The national skilled addressee is the original man who may not have the advantages that some employees of large companies may have. The information in a patent specification is addressed to such a man and must contain

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<sup>22</sup> *General Tire and Rubber Co. v. Firestone Tire and Rubber Co.*, 1972 RPC 457.

<sup>23</sup> *British Acoustic Film v. Nettlefold Productions*, 1936 RPC 221.

sufficient details for him to understand and apply the invention. It will only lack an inventive step if it is obvious to such a man.<sup>24</sup>

ii) The second group of prior art is the **enhanced knowledge** that the good expert would necessarily access when confronted with a new problem. This includes all textbooks (old and new, even if not frequently consulted), patent literature, and articles in the current technical literature.

I think it is reasonable to assume that a good expert should consult and have access to all published patent literature of the three major patent systems, namely United States, Europe (European Patent Office) and Japan, which represent 95% of all patent literature (important national patents also follow the U.S. and/or European and/or Japanese route), as well as the patent literature of the most industrialized countries, and also of non-industrialized countries that are specialized in the relevant technology. A decision of the European Technical board held that “the expert must be presumed to study patent publications in the relevant patent classes with particular interest.”<sup>25</sup> I think it is also reasonable to assume that the expert should consult general technical publications and specific technical publications in the specific field of endeavor.

iii) The third group of prior art is the **hidden knowledge** that is in the possession of somebody in the world, but not in the possession of the average expert. The notions in this class are very different, as far as their availability is concerned. One may think of an old textbook, perhaps in a language different from that of the patent. Such prior knowledge was not considered prior art in a decision of the European Technical Board – perhaps the wrong conclusion.<sup>26</sup> Belonging to this class would be the results of a literature search of a remote store of knowledge, which would require large effort, or which could be found only by accident.<sup>27</sup>

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<sup>24</sup> *Beloit Technologies Inc. v. Valmet Paper Machinery Inc.*, 1997 RPC 489 (CA). And H. Laddie J., in *Raychem Corp's Patents*: “The common general knowledge is the technical background of the notional man in the art against which the prior art must be considered. This is not limited to material he has memorised and has at the front of his mind. It includes all that material in the field he is working in which he knows exists, which he would refer to as a matter of course if he cannot remember it and which he understands is generally regarded as sufficiently reliable to use as a foundation for further work or to help understand the pleaded prior art. This does not mean that everything on the shelf which is capable of being referred to without difficulty is common general knowledge nor does it mean that every word in a common text book is either. In the case of standard textbooks, it is likely that all or most of the main text will be common general knowledge. In many cases common general knowledge will include or be reflected in readily available trade literature which a man in the art would be expected to have at his elbow and regard as basic reliable information.”

<sup>25</sup> *AECI / Thermoplastic sockets*, T 1/81, OJ 1981, at 439.

<sup>26</sup> *Lucas Industries / combustion engine*, T426/88, 09.11.90, not published.

<sup>27</sup> B. Hansen, F. Hirsch, *supra* note 2, at 69, quoting 3 Ni 52/93 of 13/12/94.

One may think of:

- a thesis paper deposited in the bookshelves of a university and relatively easily accessible;<sup>28</sup>
- a thesis paper in a remote university;
- a disclosure made in a publication not addressed to the skilled expert, or even one contained in a children's cartoon – the so-called Mickey Mouse anticipation;<sup>29</sup>
- a conference given to experts;
- a conference given to non experts but attended by one or several experts; or
- a publication given to a library, then lost or destroyed after a day, a week, a month, or a year.

Examples can be easily multiplied, going from relatively difficult availability to difficult, to very difficult, to extremely difficult.

Such hidden knowledge is considered prior art by law.<sup>30</sup> It destroys novelty. The fact that it is hidden is not considered relevant; the art is imputed to the knowledge of the expert, even if he does not know it. I will therefore call this prior art **imputed knowledge**.

Some prior art that is hidden in certain countries, or for certain technologies, may be considered not-hidden in other countries or in other fields. For instance, there was discussion in Japan as to whether an Austrian patent contained in a microfilm could be considered a prior art. The Supreme Court said that it was, because it could have been freely duplicated. The decision would have been different were a duplication (or perhaps a free duplication) in Japan impossible.<sup>31</sup> In Austria and in Europe, a prior Austrian patent would have been considered a prior art without hesitation.

As an example, a prior use of a car engine in Detroit for one year should be considered a not-hidden prior art; but this would not necessarily be so in Rovaniemi, Finland.<sup>32</sup> In the Detroit case, the information could belong to the second group (enhanced general knowledge); in the Finland case, to the third group (imputed knowledge). Similarly, an important thesis paper on silicon technology that exists in a university in the Silicon Valley should probably not be considered hidden, but it would be hidden if it were at a university in a country not experienced with ICs.

iv) The fourth group of prior art, **prior applications**, consist of patent applications that are European (for European patents) or national (for national patents in countries that have legislation similar to Europe's), of which the filing dates are prior to the date of application or priority of the patent whose novelty is evaluated, provided that these prior applications

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<sup>28</sup> Compare *Research corporation / Publication*, T381/87 OJ 1990 at 213.

<sup>29</sup> Szabo, G.S.A., *The Problem and Solution Approach in the European Patent Office*, IIC (1995) at 457-62.

<sup>30</sup> See G. Paterson, *supra* note 1, at 373 *et seq.*

<sup>31</sup> Supreme Court, July 17, 1996; Tokyo High Court, Oct. 30, 1978; H. Nakayama, *Patent Law Commentary*, Tokyo, 1989, at 195.

<sup>32</sup> Compare T84/83, EPOR:C:796, concerning prior use of a mirror for a car.

were published on or after the date of the application of the patent (Art. 54(3) EPC). This argument has been examined more than once,<sup>33</sup> and I do not have anything to add here.

Coming now to a conclusion, I believe that all four groups of prior art – common general knowledge, enhanced knowledge, hidden (or imputed) knowledge and prior applications – must be considered in the assessment of novelty. An invention that is different from the prior information is *new*. When it is identical, or almost identical, even to a hidden prior art, it is not new, and therefore not an invention.<sup>34</sup>

This conclusion seems to imply that, for the purpose of establishing novelty, distinguishing different categories of prior art is not necessary. But this is not correct. The separation of common general knowledge from the other classes of prior art is still essential.

Functional identity of the prior art with the alleged invention takes away novelty. An incomplete prior art may be completed and result in a teaching which deprives the novelty. Now, in order to establish functional identity, and also in order to complete the prior art, the expert has to resort to the common general knowledge, and read the prior document in light of said knowledge. The expert cannot resort to enhanced knowledge, or to hidden knowledge to complete a piece of information. He can only use the first class of information.

A conclusion can be drawn at this stage. The prior art can be divided into four classes:

- common general knowledge;
- enhanced knowledge, integrated if necessary by common general knowledge;
- hidden knowledge, integrated if necessary by common general knowledge;
- prior applications, integrated if necessary by common general knowledge.

## 5. Non-obviousness

Inventive level, or **non-obviousness**, requires a certain difference from the prior art. How big the difference should be is a matter of long debate. Elsewhere I have said (and perhaps demonstrated, or at least tried) that an invention is the connection or combination of two distant ideas, where a rule of connection did not exist before, said connection being made with an act of insight or intuition, and not of reasoning.<sup>35</sup> Every invention requires prior ideas (prior art) to be combined. When the ideas are distant (*i.e.*, there is no principle of combination), a combination can not be made with an act of inference, but only with a

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<sup>33</sup> See for instance G. Paterson, *supra* note 1, at 386 *et seq.*

<sup>34</sup> For an explanation of the historical reasons of a bar of patentability for anticipations not generally known, where “the public at large are not one with the wiser as to the nature of the invention” because of the anticipation, see Lord Diplock in *Bristol Myers Application*, 1975 RPC 1270.

<sup>35</sup> M. Franzosi, *L' invenzione*, 1970 at 111.

different faculty of the mind, namely, insight.<sup>36</sup> A demonstration would go beyond the scope of this article.

Here, I would like to explore, simply, whether it is legitimate, in evaluating non-obviousness, to combine pieces of information from all four classes of prior art, or only some of them.

## 6. Two classes of prior art for non-obviousness

The evaluation of non-obviousness cannot take into consideration the fourth group of prior art, **prior applications**.<sup>37</sup> But how much consideration can be given to information in the other three groups indicated above – common, enhanced, and imputed knowledge?

The common teaching is that, apart from prior applications, all prior art that is relevant for novelty is also relevant for non-obviousness.<sup>38</sup> But this is not correct. Only some of the prior art that is relevant in the evaluation of novelty is relevant with respect to non-obviousness. There is a basic difference between novelty and non-obviousness. The practice admits it; at least it does not take into consideration all the prior art. But this is done in a certain empirical way, without a clear understanding. This of course results in an unclear, non-uniform application of the law.

i) There is no doubt that the **common general knowledge** has to be taken into consideration in the evaluation of non-obviousness. This is the first and basic set of knowledge. It is the starting point in integrating the relevant prior art. It is the linking element between two pieces of prior art. When they do not appear to be connected, it is the common general knowledge that may provide some indication that allows the pieces of information to be connected.<sup>39</sup>

ii) **Enhanced knowledge** also has to be taken into consideration. The task of the good expert is to complete his preparation and to consider as many ideas as possible. Therefore, enhanced knowledge should also be considered with respect to inventive level. In the *Kraftwerk Union* case, it was said that “if a designer working on the development of (an) apparatus does not possess the technical knowledge to overcome difficulties, he can be expected to consult the relevant prior art for components which perform the same function and are better able to meet the requirements.”<sup>40</sup>

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<sup>36</sup> In the sense that “in the majority of cases before the EPO in which a finding of lack of inventive step is made, the finding is based upon a combination of teachings from documents,” G. Paterson, *supra* note 1, at 433. See *BASF / metal refining*, T24/81, OJ 1983, at 133: “a process... is not deemed to involve inventive step if [it results from] an obvious combination of teaching from the state of the art.”

<sup>37</sup> Arts. 54.3 and 56 EPC.

<sup>38</sup> See G. Paterson, *supra* note 1, at 390.

<sup>39</sup> *Mobius / Pencil sharpener*, T176/84, OJ 1986, at 50: “The state of the art... includes...any [information] which the person skilled in the art of the specific field must be expected to be aware.”

<sup>40</sup> *Kraftwerk Union / Eddy current testing device*, T15/81, OJ 1982, at 2.

However, there is a basic difference between the first group of information (common general knowledge) and the second (enhanced knowledge). Both are relevant, but here's the difference:

- common general knowledge is taken into consideration in its totality; while
- enhanced knowledge is all available to the expert, but in each single instance he will make use of the specific information which he believes pertinent.

A profound distinction is made between availability and use. In the evaluation of non-obviousness, the expert has all the enhanced knowledge at his disposal – but he has no reason to make use of it all; he uses only what he considers pertinent. Perhaps the easiest explanation lies in the difference between “could” and “would.”<sup>41</sup> Regard must “be given to whether a skilled person *would* have arrived at the claimed solution to a problem (as compared to whether he *could* have done so)”<sup>42</sup> [Italics added]. Likewise, in the *Rider* case it was said: “[T]he proper question to be asked was not whether the skilled man could have provided [a certain feature], but whether he would have done so in expectation of some improvement or advantage.”<sup>43</sup> And the *Allied* decision states:

While [the skilled person] could have found by mere chance or extensive research and testing...a variant in the area [of his endeavor], he had no good reason to move in such direction...in the absence of any expectation of improvement. The assumption must therefore be that he would not have done so in the circumstances....<sup>44</sup>

The question of whether certain information must be taken into consideration may depend on whether it was obvious to apply in the circumstances of the particular case, and in those circumstances it will be necessary to take into account the expectation of achieving a good result. But that does not mean that in every case the decision as to whether a claimed invention was obvious can be determined by deciding whether there was a reasonable expectation that a person might get a good result from trying a particular avenue of research.

iii) The expert has no reason to search for **hidden knowledge**. It is there, but the expert does not know it, and cannot know it. He would have no reason to search in every remote corner of the world, or in any remote corner of the literature, to find something that he does not know exists. What the expert would not seek, cannot be taken into consideration. It exists potentially, but not in the real world. It is like hidden treasure buried in a remote shore of an uninhabited island. It cannot be considered as being at the expert's disposal for the purpose of inventiveness.

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<sup>41</sup> See Szabo, G.S.A., *The Problem and Solution Approach in the European Patent Office*, IIC (1995) at 457 at 475 *et seq.*

<sup>42</sup> G. Paterson, *supra* note 1, at 444.

<sup>43</sup> *Rider / Simeticone tablet*, T 2/83, OJ 1984, at 265.

<sup>44</sup> *Allied / Cobalt foils*, T 265/84, 1987 EPOR 193.

Here again, the decisive principle is that the expert takes into consideration only the information that he would consider, not that which he could consider.<sup>45</sup> It is applicable with greater force to hidden knowledge than to enhanced knowledge. The expert would not take into consideration hidden knowledge, for the very reason that he is not aware of it. He would not use it to combine with common general knowledge and enhanced knowledge.

There is, of course, a basic difference between the third group of information (hidden knowledge) and the second one (enhanced knowledge). The expert would not use every single piece of information from the second group, but may use some. The expert would not use any information from the third group.

iv) A piece of knowledge can be hidden when it belongs to a different art; as such, the expert would have no reason to look for it. An expert in Art A would not look into an unrelated Art B. But knowledge can be hidden even in the same field of endeavor, when the expert would not have reason to embark on research that would not seem to justify the effort. An expert would not look on the shelves of a remote university for the very simple fact that it is remote, not because the document he may be looking for may be unrelated. The governing principle is not that an expert would consider unrelated technologies to necessarily be hidden, but that hidden technologies are hidden.

v) The consistent practice of the European Patent office is to establish non-obviousness first by identifying the closest prior art (step one), and second, by ascertaining whether there is an inventive step starting from that prior art (step two). This second step is done by checking whether a combination with some information contained in the prior art is possible.

Now, I said before that hidden knowledge cannot be taken into consideration for creating such a combination. This clearly excludes the possibility of using it for step two. But can a piece of hidden knowledge be used as the starting point (namely for step one) when it is the closest prior art? The answer, in my opinion, should be “no.” In no instance is hidden knowledge relevant for non-obviousness. In decision T 334/92,<sup>46</sup> it was said that a document cannot seriously be taken into consideration when it is too old, such that the specific prior art has been forgotten. The Board esteemed that consideration of such a document would be “unrealistic.” In no instance, therefore, can hidden knowledge be relevant for non-obviousness.

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<sup>45</sup> *Auer-Sog / Light reflecting slats*, T39/82, OJ 1982, at 419: “To arrive at a proper assessment of inventive step it (is) necessary to examine whether the prior art gives the skilled person an indication for applying this measure in the present application.” And in T176/84 *Mobius*: “The solution depends...on whether the person skilled in the art seeking a solution to a given problem would take into account [certain] developments.”

<sup>46</sup> OJ 1995, 36.

## 7. Conclusion

Summing up, in the evaluation of novelty, the expert considers information contained in common general knowledge, enhanced knowledge, hidden knowledge, and prior applications. Common general knowledge is the yardstick to use in evaluating all the prior art, *i.e.*, in interpreting, understanding, and completion. If the alleged invention is technically identical to a piece of information contained in one of the four categories, the invention is not new.

In the evaluation of non-obviousness, the expert considers information contained in the common general knowledge. Of enhanced knowledge, he considers that information which he has reason and incentive to find. He does not consider hidden knowledge (and of course prior applications), whether in the same field of endeavor or a different one.

The difference between novelty and inventive level, therefore, is not simply a difference of degree; and an examination of non-obviousness does not render useless an examination of novelty.