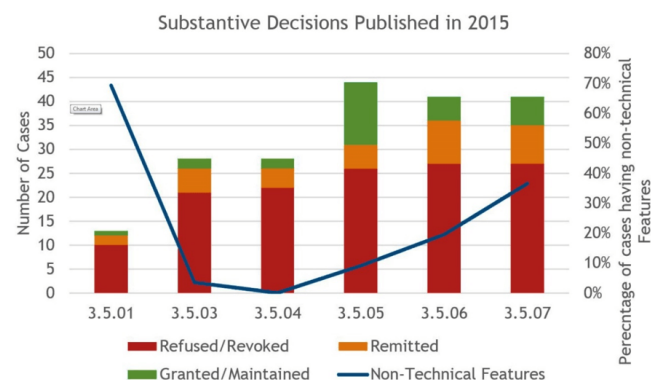


## Review of EPO Software Decisions in 2015

### Statistics & Trends

2015 saw a great deal of controversy relating to the structure and independence of the Boards of Appeal of the EPO, which has been well covered elsewhere<sup>1</sup>. In particular, there is a shortage of Board Members and a freeze on recruitment which seems to have hit productivity. For example Board 3.5.01, which mostly takes cases relating to computer implemented business methods, lacks a Chairman and published notably fewer decisions than other Boards in the 3.5 group, covering IT, communications and electronics. Unsurprisingly backlogs show no sign of diminishing: over 85% of the decisions of these Boards published in 2015 derive from appeals filed in 2012 or earlier.

All of the Boards dealing with computer-related subject matter<sup>2</sup> continue to refuse or revoke the majority of cases they hear, though there is some variation between the Boards. The chart below shows the outcome by Board of cases in which a substantive decision was reached (i.e. excluding inadmissible appeals and appeals on purely procedural issues) as well as the percentage of cases in which some claim feature was held to be non-technical. Cases are allocated to Boards by IPC code so that Board 3.5.01 sees the most non-technical subject matter and unsurprisingly therefore, grants the fewest cases.



Also apparent from these charts is a trend occurring across many Boards: to remit a case for further prosecution at 1st Instance, rather than ordering grant. Although this is often justified as allowing the appellant the benefit of consideration of any outstanding issues at two instances, the effect is usually significant delay, especially in the event that a second appeal follows the further examination.

### The Comvik Approach to Mixed Inventions

Turning to substantive law, 2015 has seen consistent application of the “Comvik” approach, whereby non-technical features in a claim to a “mixed invention” are disregarded for consideration of inventive step. Indeed, the presence of features considered to be non-technical is a strong predictor of the eventual fate of an application. Out of 34 cases published in 2015 where at least one

feature of a claim was deemed non-technical, 31 were refused, two granted - T0117/10 (Blackberry/Moving Cache) and T1981/11 (User-attributed rights/PHILIPS) and one remitted for further prosecution - T0845/12 (Implicit signature scheme/CERTICOM).

T0117/10 (Blackberry/Moving Cache) concerned an application relating to the updating of a calendar in a portable computing device (e.g. a smartphone). On a previous appeal the invention had been held (T1265/06) to be inventive over the prior art but remitted for further prosecution. The Examining Division cited more prior art but in the second appeal the Board held the newly cited prior art to be no more relevant than that considered the first time round. On the issue of what is technical, Board 3.5.01 observed:

*The circumstance that a specific ordering and grouping of calendar entries which have their rationale in non-technical considerations, are essential to this update process does not override its overall technical character. A per se non-technical feature which interacts with a technical feature in such a manner that a technical effect is achieved has, in this specific combination, to be taken into account in assessing inventive step.*

A similar point was made by Board 3.5.05 in T0336/14 (Presentation of operating instructions/GAMBRO):

*[I]n the assessment of whether or not a feature provides a technical contribution, the feature shall not be taken by itself, but its technical character shall be decided by the effect it brings about after being added to an object which did not comprise that feature before.*

Thus a feature of a claim should not be considered in isolation, but in context in the invention of which it is a part. The Guidelines for Examination G VII 5.4 were amended with effect from 1 November 2015 to reflect this approach:

*When assessing the inventive step of such a mixed-type invention, all those features which contribute to the technical character of the invention are taken into account. These also include the features which, when taken in isolation, are non-technical, but do, in the context of the invention, contribute to producing a technical effect serving a technical purpose, thereby contributing to the technical character of the invention.*

However, in T2230/10 (Context-based information retrieval/PHILIPS) this approach failed to convince Board 3.5.07. The applicant argued that an improved algorithm for selecting additional keywords in a search query lead to a technical effect of better results and less network traffic, but the Board considered that the algorithm was “fully determined by considerations that are, in a broad sense, linguistic.”

In T1981/11 (User-attributed rights/PHILIPS) Board 3.5.06 granted

a case relating to digital rights management. The invention allowed the user of a DRM-protected work, rather than the rights holder, to impose further use restrictions, e.g. parental controls, but included some cryptographic features. This illustrates the distinction that a licensing scheme is not patentable but details of a cryptographic implementation of such a scheme can be, the Board commenting that:

*the concept of allowing users to provide restrictions on given rights is a legal or administrative (i.e. "businesslike") matter and does not, as such, solve a technical problem.*

and therefore:

*The board therefore regards as obvious the desire to enable users to formulate their own rights restrictions within the framework of a given DRM system and without involvement of a third party.*

Nevertheless, the Board considered the specific treatment of cryptographic keys that was claimed to be not obvious even though it did not provide a particularly high level of security.

The same Board came to a similar conclusion in [T0845/12 \(Implicit signature scheme/CERTICOM\)](#) concerning an invention aiming to solve problems in verification of digital certificates. The Board commented that:

*the association of a certificate with one particular transaction is a mere legal declaration of the rights conferred by a certificate rather than a technical issue*

but went on to review the remaining features of the detailed implementation of the method against certain prior art, ultimately remitting an Auxiliary Request for further review by the Opposition Division. Similarly in [T1195/09 \(XML executable/NOVELL\)](#) the Board held that the distinguishing features

*are related to non-technical requirements regarding data access policies. Such policies do not contribute to the technical character since they are established by the data owner or data administrator and independently of any technical considerations.*

But after disregarding these features there was nothing left to save the application from refusal as obvious.

[T0336/14 \(Presentation of operating instructions/GAMBRO\)](#), mentioned above, is one of a number of cases relating to user interfaces. In that case, the application was refused. The Board held that

*the distinguishing features are related to the content of the information, i.e. to 'what' is presented, rather than to the manner in which the information is presented, i.e. to 'how'*

and went on to consider "'why' (i.e. 'for what purpose') the content is presented". The Board held that the distinguishing features "cannot credibly support a continued and guided human-machine interaction process" and refused the application.

On the other hand, two cases relating to interpretation of gestures - [T0077/14 \(Detection of scrolling gestures/PHILIPS\)](#) and [T2488/13 \(Detecting web-page gestures/APPLE\)](#) - were allowed by Board 3.5.05 on the basis that problems relating to correct interpretation of gestures on touch screens and extending the range of gestures that can be recognised are technical.

## Refusal to Search

A common occurrence with applications relating to computer implemented business methods is that the Examining Division refuses to search the invention, asserting that the only technical features are "notorious" and so there is no need to cite specific prior art. "Notorious" prior art is that whose existence cannot be denied by a reasonable person: generic computers, networks and communication devices.

This occurred in [T2467/09 \(Custom stores/APPLE\)](#) but the refusal to search was successfully appealed. The invention concerned automated construction of custom webstores and Board 3.5.07 did not think that, as asserted by the Examining Division, "technologies for the dynamic building of webpages" were notorious at the priority date (2000). Also, the Examining Division had not explained how such prior art (assuming it existed) would anticipate the claimed invention. The Board commented:

*If an applicant contests an assertion that something was known at the effective filing date, the examining division must normally back up that assertion with evidence and can only exceptionally confine itself to giving cogent reasons [that the thing was known]. The argument that certain knowledge is notorious is only a sufficiently cogent reason if it satisfies any reasonable addressee, i.e. if, at the time the argument is to be assessed by the applicant and, in case of an appeal, by a board of appeal, it cannot be reasonably disputed that that knowledge formed part of the common general knowledge of the skilled person at the effective filing date. Such knowledge will almost necessarily be limited to generic features, defined in such a way that technical details are not significant.*

A refusal to search was however upheld in [T1952/12 \(Validating posting requests/SAP\)](#) where the Board held that the Examining Division were entitled not to search a business method underlying the claimed invention because it was ultimately not relevant to the determination of inventive step whether the business method was new or not.

## What is Technical?

Quite a few appellants sought to have questions referred to the Enlarged Board of Appeal with the aim of overturning the Comvik approach. Unsurprisingly all failed, with the Technical Board professing themselves well able to deal with the issues at hand. Frankly asking for questions to be referred seems mostly to be a sign of desperation. The "Comvik" approach (disregard non-technical features) is now very well embedded in EPO case law and unlikely to be changed in a hurry.

The outstanding issue is a definition of "technical" but the "elephant" approach - "I know it when I see it" - seems preferable to a bad definition. In [T1461/12 \(Two unlock keys/UNILOC\)](#) Board 3.5.06 expressly refused to define technical, stating:

*the board agrees that the term "technical" is not defined in the EPC or in the jurisprudence of the boards of appeal. The term "technical" thus requires interpretation by the boards. As explained above, the list of non-inventions according to Article 52(2) EPC is considered to illustrate what is not technical; that is, the matter excluded from patentability is generally considered to be non-technical matter. The boards therefore interpret what is or is not technical in each individual case before them using their judgment in view of Article 52(2,3) EPC.*

Thus the best we can do is look at examples.

## Examples of Things not Technical:

In 2015 there were several cases relating to search:

in [T0306/10 \(Relationship discovery/YAHOO!\)](#) Board 3.5.07 saw the invention as nothing more

*than the identification of at least one "result item" that bears a particular statistical relationship in terms of item selections to at least one "query item". In the Board's view, such a statistical aim does not constitute a technical purpose.*

The same Board held similarly in [T0598/14 \(Enhanced retrieval/BRITISH TELECOMMUNICATIONS\)](#) that linguistics issues were translated by statistical analysis into a mathematical model with the aim of enabling the linguistic analysis to be done automatically by a computer, and

*According to established case law, such linguistic aspects do not have a technical character.*

[T0058/11 \(Reordering system/AOL\)](#), which concerned reordering search results to improve relevance, met a similar fate, Board 3.5.07 again holding that the invention was a non-inventive implementation of:

*the non-technical model of word usage described as the 'non-aggressive learning principle'*

Rejected cases relating to business methods included:

- [T0273/12 \(Electronic trading/ALTEX-ATS LTD\)](#) relating to over-the-counter (OTC) trading of assets such as derivatives. The Board held that any advantages provided

would only be as a consequence of OTC trading, which is a method of doing business and, hence, not technical.

- [T0886/10 \(Donation for content/SONY\)](#) and [T1143/09 \(Donation management/SONY\)](#) two related cases for a system using points for clicks and voluntary donations to reward content providers.
- [T0541/10 \(Sensitive information/PAYPAL\)](#) claimed a scheme for effecting transactions without revealing certain details. The Board observed the method

could be practised using conventional account books and pencil.

- [T1755/10 \(Software structure/TRILOGY\)](#) related to a method for determining performance-related commissions to be paid to sales representatives.

In [T1755/10 \(Software structure/TRILOGY\)](#) the applicant sought to argue that a new program caused the computer executing it to operate in a new way and therefore provided a technical effect, irrespective of what the program actually did. Board 3.5.01 robustly rejected that argument describing it as a fallacy<sup>3</sup> that would make the exclusion of programs for computers toothless.

An unusual case was [T2187/10 \(Image-Guided Procedure/Z-KAT\)](#) which related to a kit for image guided surgery comprising "single use" surgical instruments and software which was configured so as to operate only once. Although the applicant sought to argue various technical effects of the invention, Board 3.5.06 did not accept these as realistic and held that ultimately the motivation behind the invention was "to reduce the capital cost of the apparatus by also charging the user a fee per surgical

procedure carried out using the apparatus" which is non-technical and its implementation obvious.

Another theme was cases that were seen as mere automation of non-technical methods:

- [T0674/10 \(Generation of media program/MEDIC INTERACTIVE\)](#) in which "the steps of the claim would usually be performed by a human editor using a system for creating an audio-visual media program."
- [T0631/11 \(Colour data transmission/SUN CHEMICAL\)](#) was "a mere semi-automation of a non-technical design procedure followed by a designer of a colour product."
- [T2142/09 \(Vehicle deformation analysis/SIRI\)](#) where the Board held that:

the underlying teaching of the present invention consists merely in the realisation that steps, which are usually performed by an expert facing the task of providing an estimate of damage suffered by a motor vehicle and of the corresponding repair cost, can be carried out automatically by means of appropriate computing algorithms.

Several cases related to the presentation of information:

- [T1237/10 \(Information processing apparatus/SONY\)](#) and [T1214/09 \(Information managing device/SHARP\)](#) both provided schemes for displaying thumbnail images which were seen as having no technical effect.
- [T1834/10 \(Image selection/EBAY\)](#) related to a system by which "a web page is made more attractive to potential customers by presenting images in a lively manner, and the images to be presented are selected and displayed automatically so that the presentation can be changed rapidly.
- [T1205/09 \(Generating presentations/ACCENTURE GLOBAL SERVICES\)](#) was distinguished over the prior art was seen as solely a particular report format with a particular arrangement of fields.
- [T1562/11 \(Closing out white space/SAP\)](#) related to automatically shifting items in a GUI to minimise whitespace which served no technical purpose and was merely a matter of layout design.

[T2249/13 \(Mobile device/TRADE CAPTURE\)](#) illustrates a common difficulty encountered when seeking to argue that features are technical: a lack of implementation detail in the description. The invention related to "real-time" display of trading information on a mobile device. Board 3.5.01 disparaged the "cognitive meaning of information received, displayed and transmitted (multimedia content, market data, transaction execution command)" as non-technical and the "use of an icon as a means for inputting a command" as "another notorious GUI feature". Thus the receipt of live data feeds was the only possibly technical feature left, but the description was lacking in details as to how live feeds were to be implemented, leaving the Board to conclude that they were obvious.

In two cases, the choice of particular programming environments was not seen as technical. In [T0423/11 \(Aircraft data management/HONEYWELL\)](#) an ordinary dataflow-oriented graphical programming language was used for processing flight data. The Board held that the only effect of this choice was to ease the work of the programmer developing the system, but this lacks

technical character. In [T0761/11 \(Graphical data flow programming environment/NATIONAL INSTRUMENTS\)](#) a scheme for compiling a graphical program into a model of another program which in turn is compiled was claimed to provide “simplicity”. However Board 3.5.06 held that

“simplicity” cannot per se be considered to be a technical effect. It might perhaps lead to a technical effect in certain cases, but in the present case there is not even any simplification.

## Technical

Notable cases where subject matter was found to be technical included [T0756/09 \(Fluid flow simulation/MOLDFLOW\)](#) which related to:

a method for the simulation of flow in a three dimensional object that can produce simulations substantially automatically, without requiring the solution of the governing equations in their full generality.

[T2317/10 \(Generating audio/video signals/SONY UNITED KINGDOM\)](#) related to automated inclusion of bookmarks in the form of pictures when recording a video and although some aspects of the invention related to non-technical subject matter the Board held:

in the context of the claimed invention the inclusion of picture stamps in the generated metadata during the recording phase comes with the additional benefit of allowing the picture stamps to be displayed on the screen of the portable data processor used for entering metadata. Although it may be questioned whether their display as such serves a technical purpose, enabling such display by technical means undoubtedly is a technical effect.

Since, furthermore, none of the documents on file suggests

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generating picture stamps of audio/video material as part of the recording phase, the Board finds that the subject-matter of claim 1 involves an inventive step

In [T1211/10 \(Two-Channel authentication/ERICSSON\)](#) Board 3.5.06 disagreed with the Examining Division, holding that

token-based authentication by means of a mobile phone [] is a technical problem. The particular application context in which this problem is solved, i.e. online shopping, does not detract from the technical nature of this problem.

However, ultimately the invention was found not to be inventive.

And finally, a surprising decision, to my view, is [T1880/10 \(Advertising Delivery/INVIDI\)](#) decided by Board 3.5.04. The invention related to the determination of the gender balance of the audience of a smart TV in order to assist in the delivery of targeted advertising. The specified process for determining the gender balance included reference to “a table listing programmes, categories and genres” and “an electronic programme guide” and the assumed audience gender balance was compared to a received target criterion. The board was persuaded that “these features contribute to the technical solution of the problem of how to provide more efficient delivery of targeted assets which can take account of a gender make-up of a current audience in real time without compromising the privacy of the audience.”

## Footnotes

1. See IPKat, TechRights, FOSS patents blogs and Intellectual Asset Management
2. All of the 3.5 group except 3.5.02 which deals mostly with components and analogue electronics
3. See previous briefing “Computer-Implemented Inventions - A Further Fallacy at the EPO”