

This document includes some recent decisions of the EPO in 2014 with regards to software related inventions and shows relevant extracts from the respective decisions.

T 0042/09 (Logical hierarchical data model/BOEING) of 10.3.2014
Logical hierarchical data model for sharing product information across product families

Inventive step - main request (no)

Applicant name: The Boeing Company
Application number: 03076109.2
IPC class: G06F 17/50

Cited decisions: T 0049/99, T 0258/03, T 1227/05, T 1841/08, T 1954/08

Board: 3.5.07

<http://www.epo.org/law-practice/case-law-appeals/pdf/t090042eu1.pdf>

The applicant's arguments:

The data models described in the claims were used in the technical field of computer-aided design systems and computer-aided manufacturing environments. In this technical field virtual product modelling could expedite a design process for a family of products sharing an overall product architecture. The designer could customise the product selected from a product family that included many product variants.

Before the present invention, a designer reconstructed relationships between product design domains, either mentally or with some minimal computer support. Manual tracking of such relationships incurred high costs and was prone to errors. Reduced use of effectivity, viz. defining which part went into each end product configuration, meant diminishing knowledge of what was common among different product designs.

The invention avoided the undesirable situation where there were many copies of engineering bill-of-material assembly definitions that were similar but had unique copies of product structure definitions. In addition, multiple and independent drawings, CAD data and product structures for variance were eliminated.

The "logical component usage" concept was used to check the consistency of the selection of component usages and was a mechanism to help designers understand which component usages were alternative to each other, versus which component usages fulfilled different purposes in the design.

The present invention introduced logical component usage as an abstraction of component usage. In the prior art a component usage was considered to be a relationship object. It was counter-intuitive to consider abstracting a relationship.

Claim 1 of the main request reads as follows:

"A method of designing products using CAD and of manufacturing products using CAM, wherein a product data-model is stored in a memory associated with a computer, said product data-model representing product information about at least one component that is a constituent of at least one parent assembly, comprising:

a parent assembly and two or more children, each comprising at least one component, said parent assembly holding information for associating the two children with the parent assembly;

a plurality of component-usages for holding information relating to usages of the component, said component-usages being operatively connected to a component of the parent assembly;

a plurality of logical component-usages for holding information relating to logical usages of the component, said logical component-usages being operatively connected to said component-usages; and

said parent assembly, said component-usages and said logical component-usages being hierarchically interconnected."

The Board's opinion:

The application seeks to address the problem of modelling a "family" of products. Instead of providing a separate model for each variation of a product within a family of products, a single "product data-model" is provided that captures the whole family. This product data-model models a generic product by means of a number of "logical component-usage" nodes. Each "logical component-usage" node essentially represents a logical component function and is connected, by means of a number of "component-usage" nodes, to respective "components" providing such function. The "component-usage" nodes thus represent configuration options for the "logical component-usage" node. By applying certain "applicability attributes", at each "logical component-usage" node a choice is made from the possible "component-usages" and their corresponding "components".

Although claim 1 of the main request is directed to a method of designing products using CAD and of manufacturing products using CAM", it does not define any steps, let alone steps of designing products using CAD and of manufacturing products using CAM. Instead, claim 1 defines features of a "product data-model" without explaining its relation to a method of designing or manufacturing.

In this respect, the Board notes that the invention as disclosed in the application also rather appears to be concerned with the general use of a particular "product data-model" stored in the memory of a computer in unspecified activities related to CAD/CAM. For example, paragraph [0005] of the description suggests that the product data-model may serve logistical purposes.

The arguments put forward by the appellant **further confirm that the present invention is essentially aimed at solving non-technical administrative problems** such as checking product configurations for consistency and reducing the number of copies of similar but unique documents.

The features of claim 1 relating to the "product data-model" **define an abstract information model**. Indeed, these features are worded in abstract terms and make no reference to any concrete physical representation of the product data-model. A product data-model having these features could take the form of a drawing on paper such as depicted in Figure 3A.

According to decision **T 49/99** of 5 March 2002, reasons 7, **information modelling is in principle a non-technical activity, and only a purposive use of information modelling in the context of a solution to a technical problem may contribute to the technical character** of an invention. The Board considers that the claimed connection with CAD/CAM activities cannot qualify as such a purposive technical use. The product data-model does not enable, improve, or otherwise contribute to the solution of a concrete technical problem.

The features defining the **"product data-model"** hence are **non-technical**. This means that they cannot contribute to an inventive step. Since the mere additional mention of unspecified CAD/CAM activities and the feature specifying that the product data-model is "stored in a memory associated with a computer" cannot support an inventive step either, the invention as defined by claim 1 lacks an inventive step within the meaning of Articles 52(1) and 56 EPC over a notorious general purpose computer.

T 0436/13 (Management of direct repair program/SCENE GENESIS)
of 28.5.2014

Direct repair program management systems and methods thereof

Inventive step - (no) (all requests)

Applicant name: Scene Genesis, Inc.

Case number: T 0436/13

Application number: 07760381.9

IPC class: G06F 17/50

Board: 3.5.07

<http://www.epo.org/law-practice/case-law-appeals/pdf/t130436eu1.pdf>

Claim 1 relates to a "repair management method for managing direct repair of insured devices or systems", which comprises the following steps:

Examples of recent 2014 Board of Appeals decisions related to Software Innovations

- (a) receiving at a direct repair computing system one or more repair estimates comprising repair cost and repair completion time for the repair of damage to an insured device or system reported in a claim from one or more repair shop management systems;
- (b) determining by the direct repair computing system which of the received one or more estimates are in compliance with one or more required conditions of the computing system comprising an acceptable cost to repair the damage and acceptable repair completion time range;
- (c) providing by the direct repair computing system the one or more compliant repair estimates including one or more images of the damage reported in the claim and stored feedback on one or more repair shops associated with the compliant estimates to the source of the claim;
- (d) receiving by the direct repair computing system a selection of one of the compliant repair estimates based on the compliant estimates and the stored feedback; and
- (e) awarding by the direct repair computing system the repair of the device or system to the selected one of the one or more shop management systems.

According to the Examining Division, the technical character of the method of claim 1 resided merely in a notoriously known commonplace computing system. The claimed determination steps, which related to business estimates, the estimation and the reception of administrative information by means of the computing system did not require the solution of technical problems for designers of electronic networks. Furthermore, the application did not specify any technical details beyond the use of commonplace data processing means.

The introductory part of the description makes clear that the aim of the present application is to provide a "direct repair program management method" which can both meet the requirements of the insurance carriers and fulfil the expectations of the consumers.

As to the gist of the present invention, it consists essentially in submitting to a claimant, who wishes to have an insured device, such as a car, repaired, a number of repair estimates complying with some conditions defined by the insurance carrier, and in letting then the claimant decide, on the basis of the information provided, which one of the compliant repair shops should make the repair.

Therefore, both the **problem** expressly addressed in the application and what appears to be the **underlying idea of the present invention** pertain **essentially** to the realm of **management and business administration**.

This finding is not contradicted by the possibility that the implementation of the claimed method may indeed have an impact on the repair of a device under an insurance claim. In the present case, a possible "technical effect" (e.g. higher quality of the repair work) cannot be regarded as a direct consequence of the implementation of the steps recited in claim 1 and, in fact, seems highly unpredictable, as it ultimately depends on the choice of the claimant who may be directed by personal preferences and factors not contemplated by the claimed invention.

Similarly, it could theoretically be argued that a scheme for giving workers of a manufacturing industry a pay rise linked to their productivity ultimately produces a "technical effect", as it can influence the workers' motivation and commitment, and thus have an impact on the quality of the manufactured products. **Such "technical effect" cannot however give "technical character"** to what is essentially a managerial choice.

In summary, the Board agrees with the Examining Division that neither claim 1 nor the application as a whole describes any technical interaction between an administrative process and a computing system which would go beyond a straightforward automation of administrative steps. Hence, the subject-matter of claim 1 does not involve an inventive step within the meaning of Article 56 EPC.

The Board finds it appropriate to consider the appellant's submission that the use of the parameters repair cost and repair completion time in combination provided a deeper understanding of the proposed repair work so that this combination of parameters amounted to more than a mere administrative detail. In particular, the appellant has argued that the implementation of the repair management method of claim 1 involved features which went beyond the mere interaction between conventional data processing systems, namely:

- i) one or more repair estimates comprising repair cost and repair completion time for the repair of damage to an insured device or system;
- ii) determining which of the received one or more estimates are in compliance with one or more required conditions comprising an acceptable cost to repair the damage and an acceptable completion time range;
- iii) providing one or more compliant repair estimates including one or more images of damage reported in the claim.

In the appellant's view, the technical problem faced by a skilled person starting from D1 had to be reformulated as how to improve the efficacy with which a number of differing repairs could be made by a number of repair shops (under insurance claims).

The appellant had found that the combination of the proposed duration of the repair work and the proposed cost for that repair work could provide a very accurate indication of the suitability of the intended repair work without requiring detailed manual analysis of every repair proposal. The interplay between time and cost could provide technical information about the nature of the repair.

Neither the problem identified by the appellant of improving the efficacy with which multiple different types of repairs can be carried out by multiple different repair shops, nor the alleged technical effect of features i) and ii) are mentioned in the application as originally filed.

In any case, there is no teaching in the application as filed that "the combination of the proposed duration of the repair work and the proposed cost of that repair work can provide a very accurate indication of the suitability of the intended repair work, without requiring detailed manual analysis of every repair proposal"

In summary, the subject-matter of claim 1 according to the main request does not involve an inventive step within the meaning of Article 56 EPC.

T 0631/08 (Improving image quality/SONY) of 7.3.2014 **Information processing apparatus, system and method, and recording medium**

Inventive step - mixture of technical and non-technical features (no)

Applicant name: Sony Corporation
Application number: 01307626.0
IPC class: G06F 17/60

Board: 3.5.01

<http://www.epo.org/law-practice/case-law-appeals/pdf/t080631eu1.pdf>

Claim 1 defines an information-processing apparatus for providing content data to a terminal device, i.e. essentially a content server. Its functions encompass, in a first stage, the storage of features of image data which are of interest to certain users connected via a terminal device to the content server, including an exemplary "target user" and a "similar user" as defined in the claim. Subsequently, this information is used to improve the image quality of a part of an image transmitted to the target user. The improved image part comprises features which resemble those that have been found to be of interest to the similar user, and which can thus be assumed to be of interest to the target user. The improvement is relative, namely "more than" the image quality of the other parts of the image data. Hence, according to the appellant, a reduction of the amount of the image data to be transmitted to the target user is achieved since only the areas of interest have to be transmitted in high-quality.

Present claim 1 defines, as differences to the prior art, a specific profiling of user preferences and a processing step for improving image quality. The preferences of the target user for particular features of image data are determined by analysing the input information delivered from a similar user, i.e. by analysing and storing the input of another user who has similar interests as the target user regarding the features extracted from the image data.

Determining and storing user profiles is typically done for promotion and marketing purposes and does per se not involve the use of technical means or any other technical aspects. Compilation and analysis of data concerning human behaviour and interests are activities closely related to business methods which are excluded from patentability. The Board considers that **such activities as profiling of human behaviour for promotion or other business purposes lack technical character** and are as such not able to contribute to inventive step even if carried out as a computer implemented process. The appellant has argued that the invention provides an innovative way of choosing the parts of an image that are likely to be of interest to a user. The Board cannot accept this argument since the claimed

process performs the same steps a human being might choose to take in the same circumstances, viz. collect information about users' interests (non-technical), group the users accordingly (non-technical), and present information to a target user on the assumption of similarities of personal interests (non-technical). Merely automating this process involved no inventive step.

There remains in claim 1 the step of **improving the image quality**. Unlike profiling, the improvement of image quality (resolution etc) is **possibly, but not necessarily, a technical process**. An improvement of image quality for aesthetic purposes, for example, would normally not contribute to the technical solution of a technical problem and thus not qualify as technical in terms of a patentable invention. Present claim 1 defines that the image quality of the image parts likely to be of interest according to the target user's preferences is improved "more than the image quality of the other parts of the image data" (see the claim wording). Hence, the improvement is only a relative improvement between parts of the image, and can in fact be **achieved by decreasing the quality of other parts of the image without any improvement of image quality at all** (see eg dependent claim 8). Hence, the claimed processing means does not necessarily improve the technical image transmission and rendering process but is simply employed to attract the user's attention to certain information contents, i.e. a kind of "value-added content" as referred to in claim 1. The **image improvement as defined in claim 1 is thus not a technical function or feature** of the invention and does consequently not contribute to inventive step.

For these reasons, the technical contribution provided by the claimed invention to the prior art system of document D1 does not go beyond the normal computer implementation of a non-technical concept of user profiling and content presentation. The requirement of inventive step is thus not fulfilled.

T 1919/10 (Direct Memory Mapping/EMULEX) of 9.5.2014 **COMPUTER INTERFACE FOR DIRECT MAPPING OF APPLICATION DATA**

Inventive step - (yes)

Applicant name: Emulex Design & Manufacturing Corporation
Application number: 97950879.3
IPC class: G06F 9/46, G06F 12/10, H04Q 11/04

Board: 3.5.06

<http://www.epo.org/law-practice/case-law-appeals/pdf/t101919eu1.pdf>

The application relates to an interface supporting the communication between applications on different computers based on direct memory mapping.

In order for two application programs to communicate with each other, a so-called "virtual circuit" VC is set up. The application initiating the VC informs the operating system that a region of local physical memory is to be used for transmission and receipt of data, and which virtual addresses will be used to refer to the locations in this region. These virtual addresses are said to be "mapped" to physical memory addresses. The other applications in the circuit will have to do the same.

For each application in a VC, a pair of queues is provided, a "transmit work queue" and a "receive work queue" which contain inter alia addresses of data to be transmitted or received.

The application discloses a network interface unit, claimed as an "interface", in each computer involved in a communication connection. This network unit comprises inter alia a "transmit work queue pointer register" and a "receive work queue pointer register" containing pointers to the local transmit and work queues, and a "mapping memory" into which the mappings from virtual to physical memory for each VC are loaded on need.

When a particular transmission within a given VC is to take place, the network interface retrieves the virtual addresses from the entries in the pertinent transmit work queue, uses the mapping memory to map it to the corresponding physical addresses on the sender side, and retrieves the data from the local memory at these addresses which it eventually transmits. At the receiving end, the data is retrieved and transferred to specific physical memory locations in the host memory as identified by the local memory mapping.

The board thus understands the invention as describing the communication between applications via a shared virtual address space which is, at both ends of the connection, mapped to different physical memory spaces.

Claim 1 reads as:

1. A computer interface for accomplishing a transfer from a transmitting application (60a) running on a first computer (30a), having a system bus (42a) and a first main memory (44a) connected to said system bus, to a receiving application (60b, 60c) running on a second computer (30b, 30c), said transmitting application providing an operating system (46a) with transmit virtual addresses of data to be transmitted to said receiving application, said interface comprising:

A. a mapping memory (95a) containing a map of transmit physical addresses in said first main memory corresponding to the transmit virtual address of the data to be transmitted;

B. a transmit work queue pointer register (100a) directly accessible to said transmitting application and said operating system;

wherein the operating system is arranged to

1. load into said mapping memory the transmit physical addresses corresponding to said transmit virtual addresses, and

2. enter into said transmit work queue pointer register a pointer that points to a transmit work queue (101a) in the first main memory and wherein each entry in the transmit work queue

specifies information associated with the data to be transmitted, said entry including an identification of the transfer, an amount of the data and an identification of a location of each of said transmit virtual addresses in said mapping memory;

wherein the interface further comprises:

means for accessing said first main memory in accordance with said physical addresses contained in said mapping memory to retrieve said data therefrom; and

means for transmitting said retrieved data to said receiving application on said second computer.

The board agrees with the appellant's argument that the interface according to D1 discloses neither a transmit work queue pointer register nor a mapping memory as claimed.

Regarding the former it is noted that the queue pointer registers as disclosed in the application contain pointers to queues but are not queues themselves. As it appears, these queue pointer registers enable the interface according to the invention to switch between the individual work queues provided for each virtual circuit.

Regarding the latter it is noted that the independent claims of all requests - and in particular those of the main request as refused - specify the mapping memory to map virtual addresses to physical memory on the local machine, whereas the mapping mechanism according to D1 must map virtual addresses to memory locations on the remote hosts, as argued by the appellant.

Neither of these differences was addressed in the decision under appeal, let alone acknowledged. This is sufficient reason in itself for the board to come to the conclusion that the reasons in the decision under appeal do not justify the refusal.

Beyond that, however, the board considers that the **invention relies on a different concept of virtual memory than D1 and that these concepts are incompatible with each other.**

D1 enables computers to access memory at other, remote computers. This turns the totality of memory of all connected computers into a "network virtual storage" accessible to all. Any remote address in D1 identifies a unique memory segment at some remote host, and the NVS services resolve this mapping. The address mapping must be available to and will be the same for any computer accessing remote storage. Furthermore, D1 does not disclose that a computer accessing its local memory relies on the NVS. Nor would this seem to be necessary or useful.

On the other hand, the application maps the same virtual addresses to two corresponding regions of local memory in the hosts connected by a VC. The mapping according to the invention is thus specific to the local computer, be it on the sending or the receiving side.

The board considers that this is due to the concept of Network Virtual Storage according to D1 and the board does not see how the skilled person would, in an obvious way, modify the system of D1 so as to include the memory mapping as claimed. In other words the board

considers D1 to be an inappropriate starting point for assessing the inventive step of the claimed invention.

The board therefore comes to the conclusion that the claims 1 and 17 of the main request - show an inventive step over D1, Article 56 EPC 1973.

T 1944/08 (Organising data/BERNARD CONSULTING) of
20.2.2014

Organising data in a database

Claims - clarity - main request (no)

Applicant name: Bernard Consulting Limited
Application number: 02712086.4
IPC class: G06F 17/30

Board: 3.5.07

<http://www.epo.org/law-practice/case-law-appeals/pdf/t081944eu1.pdf>

Claim 1 of the appellant's main request reads as follows:

"A method of organising storage of data in a database (2), in which conclusion sets (20, 24, 26, 28, 30; 40, 50, 60) for the database are arranged in a hierarchical structure with a plurality of levels of significance including a first level of significance (level 1) and a very least significant level of significance, the conclusion sets storing data which matches search criteria or pointers which point to the location of the data which matches the search criteria, and in which the conclusion sets are arranged such that items are inserted into a selected conclusion set at the first level of significance (level 1) until the number of items reaches a threshold value for the selected conclusion set, and then the contents of the selected conclusion set are migrated to subordinate conclusion sets, thereby emptying the selected conclusion set, and wherein following migration of the contents from the selected conclusion set, further insertions can be made into that conclusion set, characterised in that the conclusion sets are distributed through a decision graph (41,42,43,46) of the database, the decision graph comprising a plurality of branch nodes at which a search key is matched with decision criteria in order to define which decision path should be taken through the decision graph, each conclusion set being reached by one, and only one, decision path through the decision graph; wherein conclusion sets are formed at some but not all of the branch nodes (41,46); and wherein the branch nodes at which conclusion sets are not formed define decision paths extending between the branch nodes at which conclusion sets are formed."

The appellant's arguments can be summarised as follows.

The term "conclusion set" was not a commonly used term, but claim 1 of the main request defined exactly what conclusion sets were, and how they related to the decision graph. There was no standard universally used term for this feature.

The term "first level of significance" was clear. Claim 1 of the main request referred to a hierarchical structure, which was a tree-like structure using parent/child relationships. The concept of levels of significance was implicit in such a data structure.

Main request - Article 84 EPC

It is common ground that the term "conclusion set" is not a standard term in the art. In the statement of the grounds of appeal, the appellant argued that this did not render claim 1 unclear, because the claim defined what conclusion sets were through the feature:

the conclusion sets storing data which matches search criteria or pointers which point to the location of the data which matches the search criteria.

The Board agrees with the decision under appeal that this definition is **unclear**. The definition states that conclusion sets store data or pointers to data and defines this data as data matching "search criteria". It is **not clear what these "search criteria" are, as they are not mentioned elsewhere in the claim. Nor** is it clear **whether these "search criteria" are the same for all conclusion sets, or differ from conclusion set to conclusion set.** In the latter case, the definition could be understood as defining which data records are stored in a particular conclusion set, namely those data records that match the search criteria corresponding to that conclusion set. In the former case, the definition appears to be merely a general statement that data records match certain undefined search criteria.

The Board further agrees with the decision under appeal that the expression "level of significance" is **unclear**, as the claim is silent on what kind of "significance" is meant.

In the statement of the grounds of appeal, the appellant submitted that the concept of levels of significance was implicit in a hierarchical data structure with parent/child relationships and that a parent had a higher level of significance than a child. However, the **Board is not convinced that the parent node of a child node in a hierarchical data structure is commonly understood to have a "higher level of significance"**, and considers that this meaning of "significance" is also not clearly implied by the wording of the claim. On the contrary, the term "significance" could be understood to relate to the cognitive meaning of the data being stored.

It is further not clear in claim 1 how matching "data" with "search criteria" relates to matching a "search key" with "decision criteria".

In conclusion, the main request is not allowable for lack of clarity of claim 1 (Article 84 EPC).

T 1186/11 (Translation system/D'AGOSTINI) of 12.3.2014
**AUTOMATIC OR SEMIAUTOMATIC TRANSLATION
SYSTEM AND METHOD WITH POST-EDITING FOR THE
CORRECTION OF ERRORS**

Inventive step - (no)

Applicant name: D'Agostini Organizzazione S.r.l.
Application number: 01917472.1
IPC class: G06F 17/28

Cited decisions: T 0006/83, T 1177/97

Board: 3.5.01

<http://www.epo.org/law-practice/case-law-appeals/pdf/t11186eu1.pdf>

The invention concerns translation between natural languages. A computer first translates a text, and a human operator checks and corrects the translation. The way in which the computer makes its translation is not important to the invention, but it is important to understand that, as the operator checks the translation and makes corrections, the computer can "learn", so that future translations will be better. How the learning takes place is also not part of the invention.

Claim 1 according to the main request reads as follows:

Automatic/semiautomatic translation system for translating text from one language to another, of the type utilizing a system which comprises means of automatic or semiautomatic translation and means to allow the correction of the translation operated by the computer and means to implement sentence/word dictionary/ies into the computer system, and word process means in post-editing for check and correction of the mistakes of what has been translated, said automatic/semiautomatic translation system providing viewing means on monitor of a translation-interface involving a couple of text-columns, wherein each text-column includes parallel scrolling field means, characterized in that said couple of text-columns is horizontally divided, realizing at least two superimposed couples of parallel scrolling fields, forming a "+" structure in which, one couple of scrolling fields is below for translation and correction after translation, forming a couple of main translation and correction fields (F1, B-U) and the second couple is above these for accumulation of what has been translated, checked and corrected, forming a couple of accumulating fields (A1, U/Z) and wherein, said automatic/semiautomatic translation system provides the following steps:

a) making an automatic translation of the entire text;

b) after said automatic translation, using:

- transfer means (Memline) to progressively transfer the couples of top paragraphs of said main translation and correction fields (F1, Z/V) to said accumulating fields (A1, Z/V), said

automatic/semiautomatic translation system being further characterized by having correction-autolearning means and

- retranslation means to retranslate at least the first paragraph to check in said couple of main translation and correction fields (F1, B-U), said automatic/semiautomatic translation system providing means for automatically [sic] retranslation of the remaining paragraphs.

The invention builds on the appellant's earlier invention, which was the subject of document D1, WO-A1-99/45476, and which includes automatic translation and the "learning" of new translation rules. In the system according to D1, the original text is presented in one column, the translation in a second. The two columns scroll together, but that does not mean the two texts are precisely aligned: if the translated text is longer than the original, and is scrolled down ten lines, the original will also scroll down ten lines, which is too far for proper alignment.

In the system of D1, the operator may choose between a completely automatic translation and interactive translation. It is not clearly stated what happens in the former, but the appellant's explanation was that the computer translates the whole text by itself, and that is it. The alternative, interactive, translation proceeds one sentence, or paragraph, at a time. The operator is presented with a suggested translation in a pop-up window, and can make corrections. Approved translations are then accumulated in the right-hand column.

When, in D1, a new translation rule is learnt, it will be applied to subsequent translations. The first opportunity for that is when the computer translates the next sentence or paragraph.

The present invention organises the work differently. Instead of using two columns with a pop-up window for checking, the screen is divided into four fields, arranged in a square. The lower two fields contain, on the right, the translated text that remains to be checked, and, on the left, the corresponding original text. The upper pair of fields contains, on the right, the checked paragraphs of the translation, and, on the left, the corresponding original text.

As the appellant explained it, and demonstrated during oral proceedings before the Board, the operator perceives two text columns with a common horizontal dividing line. Above the division is the text in the original version (left) and in the automatically translated, but manually checked version (right); below it is also the original text (left) as well as the automatically translated, but as yet unchecked text (right). The first paragraphs (on the left and right) below the division correspond to one another and are thus presented synoptically. It is, therefore, straightforward for the operator to find matching places in the original and translated texts.

The invention also uses newly learnt translation rules differently from D1. Since there is now a translation of the entire text from the start, the new rule is incorporated by making a new translation.

As the appellant explained it, the operator, a translator, using the system disclosed in D1, has to compare original and automatically translated text passages, so as to refine the machine translation and must often spend a lot of time searching for corresponding portions of text. That is one problem the horizontal division solves since it aligns those paragraphs. However, it results directly from the way the translator wants to organise his work. Indeed, a translator

working by hand, and checking a translation, will place original and translated texts side by side for ease of reference. The translator wants to do that independently of the technical substrate, whether pencil and paper or a computer screen and keyboard.

The horizontal division also serves a second purpose. It helps the translator keep track of what has been checked, and what remains to be checked. But that too is a question of how the translator wants to organise his work, and is independent of the technology used.

Since **translation is not a technical activity**, the **Board does not consider the layout**, in particular the four fields with a horizontal division, as **solving a technical problem**. It is a **technically implemented solution to a non-technical problem**. As a result, it cannot contribute to inventive step.

A translator who notes, when checking the translation, that some word has been wrongly translated, will often want to apply the correction throughout the text. To take an example from the application, if the translator notes that the translation of "mezzi di raffronto" has been wrongly translated as "confront means" and considers that "comparing means" is better, he will want to apply corresponding changes throughout the document. Working with pencil and paper, that would no doubt be laborious and he might ask an assistant to do it. Having the computer do it is no more than automating what the translator wants to do or have done. The first impetus for "retranslation" comes from the translator. **The programming of a computer to learn new rules of translation and to apply them to a text is no doubt difficult, but it is an acknowledged part of the prior art**. What the present invention does is use that capability differently, because the translator wants to organise his work differently. Again, the Board sees a **technically implemented solution to a non-technical problem**, which does not contribute to inventive step.

The appellant correctly argued that the implementation on a computer involved technical considerations. However, the **Board does not see that the technical contribution goes beyond specifying that the computer should do what the translator wants of it**. As such, the technical implementation cannot be other than **obvious**. That is no reflection on the usefulness of the invention, but rather a consequence of how non-technical features of an invention are treated according to the Boards' jurisprudence.

In summary, the Board sees the subject matter of claim 1 as a system that uses a computer for organising work the way a translator wants it to be organised. It is common ground that the computer could do that, that it was able to make and re-make translations, and that it was able to display different parts of the text on different parts of a screen. Once the translator has decided how that should be organised, the computer implementation would, in the Board's view, have been obvious.

T 1192/10 (User interface with gesture-recognition/SAMSUNG) of
7.4.2014

User interface with gesture-recognition

Inventive step - after amendment

Applicant name: Samsung Electronics Co., Ltd.
Application number: 06250568.0
IPC class: G06F 3/01

Board: 3.5.05

<http://www.epo.org/law-practice/case-law-appeals/pdf/t101192eu1.pdf>

Independent claim 1 according to the main request reads as follows:

"1. A user interface method, comprising:

measuring acceleration of an input device (1) while a button of the input device is activated ,
using the input device to generate acceleration signals;

determining whether the input device (1) operates outside any one predetermined range of a
range of sampling periods, a range of gesture periods and a range of poses of the input device;

wherein the sampling period is a period when the button is activated, a gesture period is a
period when the measured acceleration signals indicate a gesture is made, and the pose range
indicates ranges of pitch and roll angles of the input device (1) with respect to a bottom plane
on which the input device is positioned; and

characterised by generating a warning indicating that the input device has deviated from one
of the predetermined ranges when the input device (1) deviates from one of the predetermined
ranges and outputting a warning message corresponding to the warning to a user, and

generating another warning that the button (1-1) has been temporarily released from
activation, when the button is deactivated and re-activated within a predetermined time during
the gesture period and outputting another warning message corresponding to the other
warning to the user."

The subject-matter of claim 1 differs from the disclosure in D1 in that according to claim 1:

- a) warning messages are output to the user instead of having only internal messages between different components,
- b) a range of sampling periods, i.e. a period when the button is activated, is supervised,
- c) a range of poses indicating ranges of pitch and roll angles of the input device with respect to the bottom plane on which the input device is positioned is supervised and

d) temporary button release when the button is deactivated and re-activated within a predetermined time causes another warning to the user.

As far as distinguishing feature a) is concerned, the board agrees with the examining division that the **technical effect can be regarded as attracting the attention of the user to the occurrence of certain conditions**, thereby solving the objective technical problem of how to provide feedback to the user about internal states or identified conditions of the device. Outputting **warning messages is a notorious solution** to said problem.

As far as distinguishing feature b) is concerned, D1 discloses the use of a button for activation of the measurement of acceleration values and ending the measurement when the button is released. However, there is no disclosure of determining whether the input device operates outside a predetermined (valid) operation range of sampling periods (i.e. period of button activation). There is no information given that the number of samples taken is limited to a certain value. The examining division referred in its reasoning to a "sensing time-out, which is a well-known (if not notorious) feature". Even if this feature is considered to be simple, the board **does not regard it as notorious knowledge in the field of gesture recognition for the purpose of solving the underlying problem of improving gesture recognition**. The examining division did not refer to any document to support this argument. The documents on file are therefore not considered to render such a measure obvious.

As far as distinguishing feature c) is concerned, D1 does not explicitly disclose that it is determined whether the input device operates outside a predetermined (valid) operation range of poses (i.e. pitch and roll angles). However, the board agrees with the examining division that there is an implicit disclosure ...

As far as distinguishing feature d) is concerned, the board agrees with the appellant that the "temporary released" condition is not suggested at all in the prior art on file. D1 discloses the use of a button for activation of the measurement of acceleration values and ending the measurement when the button is released. However, D1 does not disclose generating a warning if the button is deactivated and re-activated within a predetermined time.

The examining division's line of reasoning with reference to a button that is lit (or associated with a light, e.g. a LED) while activated or that emits a sound (e.g. a beep) when pressed, does not convince the board, because no warning is generated at the time of re-activation. This **reference to common general knowledge therefore does not render feature d) obvious either**.

The board considers that **feature d) solves the problem of informing the user of an interruption of the measurement during performing a gesture by technical means** (detecting if the button is deactivated and re-activated within a predetermined time).

The examining division's argument that, although the actual implementation of the specific validation criteria involved a technically skilled person, the definition of the expected operation (e.g. what motions and durations of the input are expected) was rather business-based, according to the intended purpose of the device and to design choices, **does not convince the board**. Whatever the reason for the definition of a gesture might be, **the underlying ranges, rolls and angles are of a technical nature**. Since distinguishing feature b) and in particular feature d) are non-obvious themselves with regard to the prior art on file,

the question of juxtaposition and synergetic effects is not relevant for the assessment of inventive step. The above reasoning with respect to claim 1 applies mutatis mutandis to the corresponding independent claim 7 for an apparatus and claim 12 for a medium comprising computer readable code, which therefore **involve an inventive step** as well.

T 1472/10 (Controlling different computer bodies by a wireless peripheral/SONY) of 1.4.2014
METHOD FOR CONNECTING COMPUTER BODY TO WIRELESS PERIPHERAL, COMPUTER, AND WIRELESS PERIPHERAL

Inventive step - (yes)

Applicant name: Sony Corporation
Application number: 02769560.0
IPC class: G06F 3/00, G06F 3/033

Board: 3.5.05

<http://www.epo.org/law-practice/case-law-appeals/pdf/t101472eu1.pdf>

Independent claim 1 according to the main request reads as follows:

“1. A connection system for setting communication between a computer body (10) and wireless peripheral equipment which are connectable by wireless communication, said system comprising:

characteristic identification information (25) held in said wireless peripheral equipment side;

an ID reader (15) for reading said identification information mounted on said computer body side (10); and

connection setting means (12) for setting a wireless data transfer channel between said computer body (10) and said wireless peripheral equipment by specifying said wireless peripheral equipment in accordance with identification information read by said ID reader (15),

characterised in that

when the wireless peripheral equipment is already communicating with another computer body (10'), the computer body (10) to which the wireless peripheral equipment is to be connected sends a message to the other computer body, whereby in response to this, the connection between the other computer body (10') and the wireless peripheral equipment is terminated.”

D1 is considered to be the closest prior art to the subject-matter of claim 1.

D1 discloses a computer system comprising a docking station for a mouse (see e.g. figure 1). A communication is established and identifiers are exchanged when the mouse is brought into proximity with the docking station. In the board's view, the embodiment without an encryption disclosed in D1 (see column 3, line 21 onwards) constitutes the closest prior art and teaches the subject-matter according to the preamble of claim 1.

The subject-matter of claim 1 therefore differs from D1 in the features of the characterizing portion of claim 1.

The board does not concur with the objective problem in the decision under appeal, which is considered to be too broad. The underlying **objective technical problem has to be regarded as how to avoid a wireless peripheral equipment controlling several computers.**

This problem is addressed in D1, which proposes the use of an encryption as a solution. This is presented as a benefit, i.e. an explicit solution to this problem, and therefore has to be regarded as a preferred solution. In contrast to the finding in the decision under appeal, it is not a mere bonus effect.

In particular, the favourable encryption disclosed in D1 serves the purpose of avoiding a "re-docking". In the board's judgement this also includes avoiding a re-docking with any other computer, as is the case according to claim 1. **The teaching of D1 therefore leads away from the claimed solution according to the characterizing portion, because it suggests using encryption** in order to avoid a wireless peripheral equipment controlling several computers, **but it does not disclose or suggest sending a termination request as claimed.** D1 is completely silent on a termination request according to the claimed solution.

The subject-matter according to claim 1 therefore involves an inventive step over the disclosure of D1.

T 2299/10 (METHOD AND SYSTEM FOR PROVIDING ONLINE MEDICAL RECORDS/ ... of 31.3.2014 METHOD AND SYSTEM FOR PROVIDING ONLINE MEDICAL RECORDS

**Additional search - necessary (yes
Additional search - technical features not notorious)**

Applicant name: MYMEDICALRECORDS.COM, INC.
Application number: 06720652.4
IPC class: G06F 19/00

Cited decisions: T 0019/87, T 0042/90, T 1434/06, T 1924/07, T 1411/08

Board: 3.5.05

<http://www.epo.org/law-practice/case-law-appeals/pdf/t102299eu1.pdf>

Independent claim 1 according to the main request reads as follows:

"1. A method for providing a consumer with the ability to access and collect health records associated with the consumer through use of a consumer account, the method comprising: assigning a destination address individually associated with the consumer account for receiving communications from at least one healthcare provider; associating access information with the consumer account for the consumer to use to access a secure web site; receiving a communication from one of the at least one health care providers, the communication directed to the destination address, the communication comprising a health record associated with the consumer for which the consumer has requested and given permission to the healthcare provider to send; storing a representation of the health record; providing the consumer with secure access to the web site using the access information and providing on the web site an interface to the health records of the consumer for the consumer to use characterised in that the destination address is a phone number, to which a private fax communication is sent by the health care provider comprising the personal health record associated with the consumer which the consumer has requested and given permission to the healthcare provider to send; converting the private fax communication into an image file format; storing the health record encoded in the image file format as the representation of the health record on a web server and in the consumer account for access by the consumer using the website interface, wherein the website interface includes means for allowing the stored health record image files to be organised and annotated by the consumer into separate file folders, said means including functionality to allow the consumer to name the file folders and add file folders."

The decision under appeal is further based on the objection that the subject-matter of claim 1 **lacks an inventive step.**

No search was carried out for pertinent prior art. The European Patent Office acting as International Searching Authority issued a declaration of non-establishment of the International Search Report under Article 17(2)(a) PCT and Rule 13ter.1(c) and 39 PCT because the claims on file at that date related to subject-matter that did not require an international search under the PCT provisions. The applicant entered into the European phase before the European Patent Office without amending the application as originally filed in the international phase under the PCT provisions. No supplementary European Search Report was established. According to Article 157(1) EPC 1973 (now Article 153(6) EPC) the declaration replacing the International Search Report took the place of the European Search Report in analogy to Rule 45(2) EPC 1973 (now Rule 63 EPC).

The closest prior art was considered to be a conventional client-server data processing and communication computer architecture as generally known at the time before the priority date of the present application, for which **no written evidence was considered necessary.**

This has been contested by the appellant. The examining division identified technical features in claim 1 on which the decision under appeal was based which are still found in present

claim 1. In particular, present claim 1 inter alia comprises at least **the following features which the board considers to contribute to the technical character** of the invention:

- the destination address is a phone number (added by amendment),
- converting the private fax communication into an image file format,
- storing the converted data in the image file format.

The examining division examined the application despite the fact that no search had been carried out. However, this is only possible in exceptional cases and, according to the jurisprudence of the boards, **an additional search for pertinent prior art may be dispensed with only if the technical features of the claims are considered to be "notorious", i.e. generic and so well known that they cannot reasonably be refuted** (see T 1411/08 of 6 June 2011, point 4).

In the board's judgment, **the afore mentioned features (see point 4.4) go beyond the mere common general knowledge** (for example the commonly encountered use of a computer, a network, an electronic database) **and cannot be considered "notorious"**. In particular, it is not considered to be notorious knowledge either to use a phone number of a user as a destination address in a client-server computer network or convert a fax communication into an image file format.

An applicant's acknowledgement in the original application that certain prior art is known is in general not a sufficient reason for not carrying out an additional search since such statements may be - and indeed frequently are - withdrawn or qualified. Moreover, this could only apply in cases where all the technical features in the claim would be acknowledged as known (see T 1924/07 of 22 June 2012, point 9). In the present case, however, the appellant at least did not acknowledge the features of claim 1 mentioned in points 4.4 and 4.5 above to be known.

Thus, **present claim 1 cannot be definitively assessed with respect to novelty and inventive step without knowledge of the relevant documented prior art**. Thus the request requires a search for relevant prior art. Hence the matter must be **remitted for an additional search** and further examination.

T 0677/09 (Smart manual/CONTINENTAL AUTOMOTIVE SYSTEMS) of 15.11.2013

Smart owner's manual

Inventive step - providing information about differences between vehicles (no Inventive step - non-technical cognitive data)

Applicant name: Continental Automotive Systems, Inc.

Examples of recent 2014 Board of Appeals decisions related to Software Innovations

Application number: 03015713.5
IPC class: G06F 17/30, G06F 17/60

Cited decisions: T 1194/97, T 1670/07

Board: 3.5.01

<http://www.epo.org/law-practice/case-law-appeals/pdf/t090677eu1.pdf>

Claim 1 of the main request reads as follows:

"A vehicle information system (10) adapted to provide to a user information associated with differences between features of a first vehicle and features of a second vehicle, the vehicle information system comprising:

a current system database (14) storing information associated with the features of the first vehicle currently used by the user;

a prior system database (16) storing information associated with features of the second vehicle previously used by the user;

a system comparison module (18) adapted to compare the current system database (14) the prior system databases (16) and to store in a comparison results database (20) disposed within the first vehicle information associated with the differences between the features of the first vehicle and the features of the second vehicle wherein the current system database (14) and the prior system database (16) are coupled to the system comparison module (18); and

an information extractor (34) disposed within the first vehicle, coupled to the comparison results database and adapted to communicate to the user at least one difference between the features of a component of the first vehicle and the features of the second vehicle in response to a user action in the first vehicle; wherein the user action comprises actuation of the component of the first vehicle."

The appellant explained the invention as follows: As automotive electronic systems offered more and more functionality and features, they were becoming ever more complicated to use. Moreover, different vehicles and/or vehicles from different manufactures often had completely different features. The invention was concerned with communicating these features to the user in an intuitive non-distracting manner which was therefore safe to use while driving. The invention solved this essentially by communicating only the features of a (new) vehicle that differed from those known from a previously used vehicle.

The system of claim 1 differs from the closest prior art in that the information given about the component represents the differences over the features of that component in a vehicle previously used by the user. Claim 1 also recites various technical means necessary to achieve this, namely a database storing the information of the previous vehicle, a comparison module for calculating and storing the differences and an information extractor for communicating the differences to the user.

The examining division considered that the **effect of these differences was the generation and provision of specific information, which was cognitive in nature and thus non-technical**. In other words, the invention simply provides improved information. The Board agrees with this. Accordingly, the objective technical problem is how to adapt the existing vehicle information system to provide the user with this information about the new features of the current vehicle. The Board also agrees with the examining division that **the technical implementation of this, namely reading data from respective databases, comparing it and storing the results, are routine measures in this field that could not involve an inventive step**.

The appellant argued that claim 1 recited that a comparison module compared the data. If this was not technical, then it would mean that a comparator was not technical. The Board agrees that **a comparator as a physical component is technical**, but this relates to the implementation aspect of the above argument, which is concerned with how the technical problem is solved. **However, in determining the technical problem the idea of comparing the data is not automatically technical by virtue of this subsequent implementation**. The technical problem depends on the effect of the comparison. In the present case, the Board judges that this effect is simply to provide information about the vehicle in a particular form that the user might find useful. The information could just as well be provided by someone sitting next to the user comparing the manuals for the new and the prior vehicles. The idea of the **comparison therefore has no technical character**.

The appellant argued that in the present context of vehicle information systems and the user action of actuating the component, the difference information went beyond the mere provision of the information because it resulted in enhanced safety, which was technical. However, the Board considers that such an effect would depend on the content of the information and the user's reaction to it. This effect is thus not the direct effect of the feature and cannot be used to formulate the technical problem.

The appellant pointed out that in data processing a signal generally has cognitive information content, but according to the jurisprudence nevertheless has technical character. However, the Board considers that this **technical character is due to the so called "functional data" implied by the signal**, which inherently comprises technical features that interact with those of the system in which the signal is operating, such as synchronising data (see for example T 1194/97 - Data structure product/PHILIPS, point 3.3). In the present case, **there are no such inherent technical features of the difference information** so that in the Board's view it does **not have a functional part, but remains purely cognitive**.

The appellant considered that such an approach would rule out patents for all types of advanced driver assistance systems. The Board does not share this concern as it is easy to imagine systems with features that might have a direct technical effect, such as giving information about the status of the engine, or about an imminent collision, or how to park the vehicle. However, in the present case, the Board judges for the reasons given above that **the information does not specifically relate to any technical condition of the vehicle, but simply differences between "features of a component", the effect of which depends on the information and covers any number of non-technical possibilities**, such as the colour or the shape of the component. Accordingly the Board judges that claim 1 of the main request does not involve an inventive step.

T 2227/09 (Allocation of computational jobs/SAP) of 27.3.2014
Multi-objective allocation of computational jobs in client-server or hosting environments

Sufficiency of disclosure - (yes)

Applicant name: SAP AG
Application number: 08004547.9
IPC class: G06F 9/50

Cited decisions: T 0763/04

Board: 3.5.06

<http://www.epo.org/law-practice/case-law-appeals/pdf/t092227eu1.pdf>

The context of the alleged invention

2The application relates to assigning computational jobs from different customers to physical computing resources comprising many processors in a client-server or hosting environment.

The application acknowledges as prior art that it is known to make the processing of customer requests as independent as possible from the actual hardware resources; see paragraphs [0002 to 0003]. To do this the hardware is treated as a plurality of "virtual machines", these being defined as "collections of individual physical resources". It is also known for a scheduler to allocate computational jobs to predefined virtual machines and for a load balancer to distribute currently running tasks by moving virtual machines so that all resources within the system have a similar utilization, thus maximizing the overall throughput of computational jobs within the system.

The alleged invention as claimed however relates to processing computational jobs with a plurality of "processors". According to paragraph [0023], the processors may contain a processing core and have access to memory and can be any type of processing device adapted for performing a computational job, for instance server computers, blade servers, personal computers and individual processors. The processors can also be realized as a multi-core system on a chip ("SOC"); see figure 3 and paragraph [0028].

Customers are typically seeking high availability of computing resources and short response times, and the service provider seeks to provide different levels of service, set out in a service agreement, in terms of resource availability and response time depending on the amount the customer is willing to pay. Hence the jobs for the highest paying customers receive the greatest availability of computational resources, whilst the jobs for other customers receive less, but still adequate, availability of computational resources, unless resources are heavily used.

The known job allocation methods acknowledged in paragraph [0005] result in sub-optimal system resource utilization. These methods divide the hosting environment into different logical partitions having different processing bandwidths. Such an approach suffers from the drawback that idle resources in one partition cannot be used to process jobs assigned to other partitions, even if this means that there are no resources available to serve a customer request in another partition. According to the same paragraph, it is also known to allocate each customer a certain quota of system time per time period. However this can lead to resources remaining idle, and thus a sub-optimal system resource utilization, if the customers making the requests have already exhausted their quotas.

The application proposes that each job has an associated priority (u), there being 1 (i.e. little "L") priority levels, and is processed by one or more processors selected from a first and a second group. The size of the first group (c) depends on the job priority, this being resource allocation according to the service agreement, while the processors in the second group are those having a current or "momentary" utilization rate (UciM) below a predetermined threshold rate (Ucu), this being resource allocation according to current resource utilization.

Sufficiency of disclosure, Article 83 EPC 1973

The communication by the examining division dated 20 February 2009 raised the objection, which was maintained in the annex dated 1 July 2009, that, **although the "utilization rate threshold values" Ucu (termed the "second predetermined utilization rate" in claim 1) played an essential role in determining the claimed "second group" of processors, the description did not specify how these parameters were calculated.** Depending on the value of the threshold values, the second group could comprise from 0 to 100% of all the processors. In other words, the selection of the second group of processors depended on undisclosed parameters, namely Ucu and, as was stated in the annex dated 1 July 2009, "the existence of a technical effect fully depended on the parameter selection" by the "system designer". **Merely the concept of "introducing parameters" was too abstract and general to be a sufficient disclosure.**

The appellant has argued that the idea underlying the invention is sufficiently disclosed, even if no explicit calculation scheme for the utilization rate threshold values is given, and that the threshold values could be determined by the skilled person, a system designer, for each specific case. According to the appellant, the idea is that if the processor subsets allocated to urgent jobs are under-utilized then they can be used for less urgent job. These processors are used to process more and more of the less urgent jobs as their utilization falls. As figure 6 shows, the utilization rate threshold value falls for processor subsets for jobs of increasing urgency.

According to Article 83 EPC 1973, the European patent application must disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. **The board disagrees with the position taken by the examining division that the application can only comply with Article 83 EPC 1973 by disclosing how the utilization rate threshold values are calculated,** which indeed the application does not.

In the light of the drawbacks in the prior art summarized in paragraph [0005] of the description, the alleged invention seeks to improve the overall utilization of hardware resources, such as the multi-core processors disclosed on page 16, lines 16 to 18, while

maintaining resource availability for jobs having the lowest priority level, meaning the most urgent jobs; see the definition of "priority" on page 20, lines 3 to 7. The **board regards an improvement in the utilization of such hardware resources as a technical problem** whose solution involves a technical effect, since it allows either more jobs to be processed with the same hardware or the same work load to be mastered by simpler hardware. In the board's view, both the claimed definition of the "first group" of processors and the definition of the claimed "second group" of processors, the definition of these groups being disclosed in paragraphs [0047, 0048 and 0051], contribute to the solution of the technical problem which the application sets out to solve over the prior art discussed in the description. An example of the utilization rate threshold values is set out in figure 6.

If a similar table to that shown in figure 6 were to be drawn up for the prior art in paragraph [0005], its elements would all be zero except for a line of elements set to 100% on the major diagonal, i.e. from top left to bottom right. Resource utilization is already improved, if only slightly, when a job with a given priority level can, if need be, processed by a processor normally allocated to jobs of a different priority level, meaning that an element off the major diagonal in figure 6 has a non-zero value. This is already made possible by the provision of the "first group" of processors set out in all the independent claims according to the main request, namely all processors in subsets of processors which are defined for priority levels greater than or equal to (i.e. urgency less than or equal to) the priority level associated with the job.

As to the claimed "second group" of processors, any non-zero threshold values above and to the right of the major diagonal in figure 6 would allow some flexibility in resource utilization and thus produce an improvement at least in some situations. Whilst it is true that the degree to which resource utilization is improved in any individual case may depend on undisclosed factors relating to that specific case, **the board is satisfied that the skilled person could, in each specific case, determine threshold values without undue experimentation which would improve the resource utilization at least to some degree.** In other words, the board is satisfied that the **invention exhibits at least some technical effect over the prior art discussed in the description which does not depend on the disclosure of a specific calculation scheme for the claimed parameters.**

Hence the board finds that the application does disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art and thus satisfies Article 83 EPC 1973.

Inventive step, Article 56 EPC 1973

The communication by the examining division dated 20 February 2009 stated that if the processing (the board understands this to mean the processing of jobs) depended on undisclosed parameters, then a possible technical effect also depended on these parameters, since the application did not disclose how the utilization threshold values were calculated, a technical effect could not be recognised over the whole range of these undisclosed parameters so that claim 1 lacked inventive step.

In the annex dated 1 July 2009 the examining division further speculated that if it could be convinced that **"routine methods would be enough, then this would be a strong pointer**

that the invention lacks inventive step since the use of these parameters constitutes the core of the invention."

The **board is not convinced by this reasoning**. Firstly, as explained above, the **technical effect of the alleged invention is not solely reliant on the values of the utilization threshold values**; a technical effect already accrues due to the provision of the "first group" of processors set out in all independent claims according to the main request.

Secondly, as stated above, the **board is satisfied that the skilled person could, in each specific case, determine threshold values without undue experimentation** which would improve the resource utilization at least to some degree. Moreover the **application discloses one example of the utilization rate threshold values** in figure 6.

Thirdly, whether the definition of the "first group" and "second group" of processors had to be considered to require only the application of "routine methods" was not decided by the examining division. Moreover the **examining division merely suggested that the potential need for only routine methods "was a strong pointer" against an inventive step, but did not fully argue this point.**

Hence the board does not agree with the reasons given in the appealed decision for the finding that the subject-matter of claim 1 lacks inventive step, Article 56 EPC 1973.
