

This document includes some recent decisions of the EPO in 2020 with regards to software related inventions and shows relevant extracts from the respective decisions.

T 2040/19 (Touch-screen device providing touch control of web pages) of 3.12.2020

European Case Law Identifier: ECLI:EP:BA:2020:T204019.20201203

Touch event model programming interface

Enabling disclosure - (yes)

Inventive step - (no)

Application number: 11184222.5

IPC class: G06F3/048, G06F17/30

Applicant name: Apple Inc.

Board: 3.5.05

<https://www.epo.org/law-practice/case-law-appeals/pdf/t192040eu1.pdf>

Claim 1 of the main request comprises the following features (as labelled by the board):

A method performed by an electronic device with one or more processors and memory storing one or more programs for execution by the one or more processors, the method comprising:

(i) providing an interface for one or more touch events, the interface configured to convey a touch list,

(ii) wherein the touch list includes touch event data to identify one or more touches on a web page,

(iii) said one or more touches being associated with a target of a touch event, and

(iv) the touch event data includes a touch identifier and at least one set of touch location coordinates for a respective touch of the one or more touches; and

(v) conveying the touch list to the web page for processing.1. The present application concerns a touch-screen device providing touch control of web pages.

2.1 Novelty (Article 54(1) EPC)

Although targeted at an academic audience, document D4 describes the development of proof-of-concept software for a touch screen interface. It describes a software library to sort the multiple finger inputs on the screen and interpret the gestures made out of them (see preface of document D4). The code excerpts and the accompanying explanations are considered to be sufficiently complete in order to allow a skilled person to transform these into working code as part of his routine activities. Consequently, the board asserts that document D4 constitutes an enabling disclosure. Furthermore, it is noted that the present application discloses the invention at a level of detail which is similar to that of document D4.

... the difference between the subject-matter of claim 1 and that of document D4 resides in that the application is a web page.

2.2 Inventive step (Article 56 EPC)

The **distinguishing feature achieves the technical effect that the user is allowed to use touch input to also control web pages displayed in a browser**. It is noted that a **browser is a notoriously known application** and commonly known to have been available on any typical computer well before the claimed priority date.

The objective technical problem may thus be formulated as how to modify what is known from document D4 to allow for controlling web pages displayed in a browser.

Document D4 teaches the implementation of gesture recognition separately from applications and mentions some types of applications to be controlled by gesture recognition, e.g., a drawing application (see D4, figure 7). **Since a browser is among the notoriously known applications of a typical computer, document D4 leads the skilled person to using gesture recognition also in the context of a browser and the web pages displayed therein**. At the claimed priority date (4 March 2008), using web applications as part of web pages displayed in a browser was a general trend. **The concept of "web 2.0" was commonly known** as proven, e.g., by documents D10 and D11. Reference is made in particular to section "Web-based applications and desktops" in document D10 and section "Interface" in document D11. Since the latter even mentions "drawing on the screen" as an example of a web application, it is considered that the skilled person would regard it as a normal design option to also support the drawing application mentioned in document D4 being implemented as a web application.

Thus, when solving the objective technical problem, the skilled person would be looking for a document disclosing enhanced user interfaces for web pages. He would consider document D1, which deals with implementing user interfaces by executing a description language on a browser (see [0004] therein).

When combining the teachings of documents D4 and D1, the skilled person would recognize that the event listeners known from document D1 (see [0085], [0086], and figures 15A-C therein) are similar to the touch listeners of document D4. Hence, he would consider providing the data relating to the user's touch events, i.e., the touch list, to the web page's script in the same way as the mouse events.

This way, the skilled person would arrive at the distinguishing features without employing inventive skills.

Consequently, the subject-matter of claim 1 of the main request is not inventive over what is known from document D4 in combination with the teaching of document D1.

Similar considerations apply to the further independent claims.

T 2388/17 (Predictive search results/Google) of 4.11.2020

European Case Law Identifier: ECLI:EP:BA:2020:T238817.20201104

Predictive query completion and predictive search results

Inventive step - (yes)

Application number: 11751746.6
IPC class: G06F17/30
Applicant name: Google LLC
Cited decisions: T 1741/08, T 0306/10

Board: 3.5.07

<https://www.epo.org/law-practice/case-law-appeals/pdf/t172388eu1.pdf>

Claim 1 reads as follows:

"A method performed by a data processing apparatus (100), comprising:

receiving (602) from a client device (106; 202) a request (109) for a search resource (111);

providing (604) to the client device (106; 202) in response to the request (109) for the search resource (105), the search resource (105) including interface instructions that cause the client device (106; 202) to generate a search interface (120) that includes a query input field (122);

receiving (606) query suggestion requests from a client device (106; 202), each query suggestion request having been generated in response to a keystroke input (126) in the query input field (122);

in response to each query suggestion request:

initializing and starting a timer that expires after a predefined time period having a non-zero short duration;

providing (608) query suggestions (113) responsive to the request (109);

determining (610) if a prediction criterion is met, the prediction criterion being independent of a user selection of a query suggestion (113) provided in response to one or more query

suggestion requests and independent of receiving a completed query from the client device (106; 202), wherein the prediction criterion is determined to be met if the timer expires before another query suggestion request is received;

in response to determining that the prediction criterion is met,

providing (612) search results (111) to the client device (106; 202), the search results (111) being responsive to one of the query suggestions (113) provided in response to the query suggestion request or one or more previous query suggestion requests; and

in response to determining that the prediction criterion is not met, not providing (614) the search results (111) to the client device (106; 202)."

Application

2. The application concerns providing search query suggestions while the user is entering a search query and providing search results related to the search query suggestions (see page 2, lines 13 and 14, and page 10, lines 1 to 3, of the international publication). According to the description on page 1, line 29, to page 2, line 11, prior-art search systems provide predicted search results with query suggestions but send many search results that do not satisfy the user's information need, thereby using excessive bandwidth.

2.1 In the method proposed in the application, upon request from a client device, a search engine provides a search resource (e.g. a web search page) and interface instructions to the client device. The search resource and interface instructions (e.g. HTML and scripts) cause the client device to generate a search interface that includes a query input field (page 9, lines 24 to 33; Figure 1; Figure 6; page 34, lines 14 to 25).

The characters entered by the user in the query input field are provided to the search engine in the form of query suggestion requests. In response to a query suggestion request, the search engine identifies query suggestions, and provides them to the client device. For example, if the user has typed "ba", the query suggestions may include "bank", "banksy", "Bankrate" and "ball". The client device presents the query suggestions to the user (page 10, lines 1 to 22; Figure 1; Figure 6; page 34, line 26, to page 35, line 8).

2.2 After providing the query suggestions, the search engine determines if a condition referred to as "prediction criterion" is met. The prediction criterion is independent of a user selecting a query suggestion or of a search request by the user and is met if a predefined time period expires before another query suggestion request is received. When the prediction criterion is met, search results corresponding to one of the query suggestions are sent to the client device and displayed; otherwise, no search results are provided (page 10, line 25, to page 11, line 10; Figure 6; page 35, line 8, to page 36, line 30).

Inventive step

7. In the statement of grounds of appeal, the appellant argued that the Examining Division had wrongly considered that the method steps did not contribute to a technical effect. The

argument behind the decision under appeal appeared to conclude that, because information was ultimately provided to the user, all steps could be simply ignored.

The **Board agrees with the appellant** that the **Examining Division's view that only the physical features of the claim have a technical character and that "none of the claimed steps [...] serves a technical purpose" is not correct.** For example, the step of **sending a search resource including instructions that cause the client device to generate a search interface is clearly technical**, even if well known.

8. On the priority date of the present application, well-known web search engines such as the Google search engine provided a search resource comprising a query input field (in the form of an HTML page defining a search-engine user interface) and, in response to keystroke inputs in the query input field, query suggestions in the way described in the steps of claim 1 of receiving (602) a request for a search resource and receiving (606) query suggestion requests, and the respective providing steps 604 and 608 (see also Figure 6). Many of these systems also provided predicted search results together with the query suggestions. This prior art is acknowledged in the following passages of the background section of the application, page 1, line 22, to page 2, line 7:

"Some search systems provide query suggestions in the form of a list of query suggestions as the user is typing a query. The user can select one of the query suggestions from the list without having to type the entire query suggestion. A client device typically sends suggestion requests to a search engine with each keystroke, and the search engine provides the query suggestions with prefixes that match the entered characters. Once received, the client device displays these suggestions for user selection.

[...]

Some search systems also provide predicted search results with query suggestions."

8.1 The method of claim 1 differs from this acknowledged prior art in that it includes the following steps:

(a) initialising and starting a timer that expires after a predefined time period having a non-zero short duration;

(b) determining if a prediction criterion is met, the prediction criterion being independent of a user selection of a query suggestion provided in response to one or more query suggestion requests and independent of receiving a completed query from the client device, wherein the prediction criterion is determined to be met if the timer expires before another query suggestion request is received;

(c) in response to determining that the prediction criterion is met, providing search results to the client device.

8.2 Hence, while in the acknowledged prior art the predicted search results are provided each time together with the query suggestions, in the **claimed invention the predicted search results**

are only provided if a short, predefined time period elapses after receipt of the query suggestion request and before another query suggestion request is received.

In the prior-art method, search results are transmitted for each keystroke, even if the user immediately after a keystroke changes the query input by entering another keystroke and the results become obsolete. In order to avoid that, in the claimed invention the search engine waits for a predetermined time period. If the user does not enter a keystroke for a predetermined time period, i.e. if the user briefly pauses while typing, there is a higher probability that the user will not change the query input before the search results are displayed. Therefore, by waiting to see if the predefined time period elapses before another query suggestion request is received, i.e. before the next keystroke is entered, the search engine reduces the probability that search results are transmitted from the search engine to the client which are subsequently not of interest to the user, and thereby reduces the amount of data transmitted to the client. At the same time, the choice of a short period of time means that the search results still appear to the user without noticeable latency when the user briefly stops typing.

In the decision under appeal, the **Examining Division argued that the claimed method was not technical** in view of the principle expressed in decision T 306/10 of 4 February 2015 that **the recommendation of content items to a user was not a technical purpose**, and also in view of decision T 1741/08 of 2 August 2012.

However, the Board agrees with the appellant that the distinguishing features are **not concerned with what information is provided to a user**, in terms of non-technical considerations relating to the user's cognitive interests, but with how information is provided in a way that reduces bandwidth usage. Consequently, the claimed method is not comparable to the invention underlying T 306/10.

Moreover, in the claimed method there is no broken chain within the meaning of decision T 1741/08, since what is being taken into account is the normal typing speed of a person and the user's average reaction time, not "the way the brain of the user perceives and processes the visual information given by a particular way of presenting information", as in T 1741/08 (see point 2.1.6 of the Reasons). The effect is not based on the fact that "a mental transition takes place more quickly than in the prior art", as in the case underlying that decision (see point 2.1.6 of the Reasons). Rather, the effect is based on considerations concerning the physical process of entering input by means of keystrokes.

Therefore, the Board agrees with the appellant that the distinguishing features have the technical effect of reducing bandwidth usage whilst at the same time maintaining low latency.

8.3 The skilled person, faced with the objective technical problem of modifying the acknowledged prior art to achieve the above-mentioned technical effect, would consider documents D1 and D4, which also deal with providing search suggestions as the user enters a query.

...

Both documents D1 and D4 teach using pauses in typing to change the rate of transmittal of requests. As in the invention, this reduces the number of query suggestions and the respective results being sent from the server to the client. However, in D1 and D4 the query results are sent each time together with the query suggestions. Therefore, the solutions of D1 and D4 reduce the number of search results by limiting, at the client, the number of suggestion requests sent from the client to the server. The **invention, on the other hand, is implemented at the server**. Combining the acknowledged prior art with either disclosure of D1 or D4 would therefore not result in the claimed invention.

The Board is thus of the opinion that the **solution disclosed by those two documents is different** from that of the present invention and is **not convinced that the skilled person**, facing the problem of reducing bandwidth usage whilst at the same time maintaining low latency, **would have arrived at features (a) to (c) on the basis of the available prior art**. The subject-matter of claim 1 is therefore not rendered obvious by documents D1 and D4.

8.4 Since, moreover, documents D2 and D3 do not disclose the distinguishing features either, the subject-matter of independent claim 1, and that of the corresponding independent claims 13 and 14, is inventive over the cited prior art (Article 56 EPC).

T 0669/18 (Multimedia object presentation/VODAFONE) of 22.10.2020

European Case Law Identifier: ECLI:EP:BA:2020:T066918.20201022

Presentation of multimedia objects at user devices

Inventive step - (yes)

Application number: 11182757.2

IPC class: G06F17/30

Applicant name: Vodafone Holding GmbH

Board: 3.5.07

<https://www.epo.org/law-practice/case-law-appeals/pdf/t180669eu1.pdf>

Claim 1 of the main request reads as follows:

"A method for presenting a multimedia object embedded into a web page at a user device, the web page being provided by a content server (105) in a first network, the multimedia object having a predetermined format, wherein a detection function is executed in the user device, the detection function determining that the web page includes the multimedia object of the predetermined format, and based upon the determination a multimedia player function is invoked in the user device, the multimedia player function being adapted to render the multimedia object by converting the multimedia object into a second format, the second

format being a standard format that can be rendered by a web browser of the user device, wherein enabling the user device (101) connected to a second network (102) to render the multimedia object involves functions of a proxy server (106) located in the second network (104) through which the user device (102) accesses the first network (103), where a request for the web page is evaluated by the proxy server to determine the device type, whereby the request includes an identification uniquely assigned to the user device (101), the proxy server reads the identification and looks up the device type in a look-up table comprising an allocation between the device type and the unique identification of user devices registered in the proxy server, and modifies the web page if the user device is of a predetermined type to include a command to invoke a program including the detection function, when the web page is received and processed in the web browser of the user device."

2. The application

The application relates to rendering a multimedia object of a given format embedded in a web page at a user device. Such multimedia objects may require special rendering software, which usually has to be pre-installed (page 1, lines 7 to 27, of the application as filed).

5. The invention as defined by claim 1

5.1 Claim 1 relates to a method for presenting a multimedia object embedded in a web page at a user device.

5.2 The web page is provided by a content server in a first network. The user device is connected via a second network to a proxy server, through which it accesses the first network.

5.3 When the proxy server receives a request for a web page from the user device, it determines the user device's device type. It does this by looking up a unique identification included in the request in a look-up table. The look-up table contains a mapping between device types and unique identifications of user devices registered in the proxy server.

5.4 If the user device is of a predetermined type, the proxy server modifies the requested web page to include a command. When the web browser of the user device processes the received web page, this command causes it to invoke a program that includes a "detection function".

5.5 The detection function determines that the document includes the multimedia object and invokes a multimedia player function that renders the multimedia object by converting it into a second format, which is a standard format that can be rendered by the web browser.

According to document D3, the proxy server itself converts/transcodes the multimedia object into a format that can be rendered by the web browser of the non-enabled device. In addition, the proxy server modifies the web page to include a command for displaying a user interface which, inter alia, may include a hypertext link for downloading transcoding software to the user device (which then turns the device into an enabled device).

6.6 The Examining Division found that the subject-matter of then claim 1 differed from the disclosure of document D3 in that (1) "the detection function and the multimedia player

function are executed at the user device" and (2) "the look-up table stores device information using a device type".

However, the identification of distinguishing feature (1) overlooks that document D3 also fails to disclose that the proxy server modifies the web page to include a command that causes the web browser to execute the detection function. While document D3 discloses both modifying the web page to include a command (to display a user interface) and executing a detection function and a multimedia player function at the proxy server, this **does not mean that modifying the method of document D3 to execute the detection and multimedia player functions at the user device necessarily brings along with it that the command included in the web page by the proxy server is replaced with a command to cause the web browser to execute the detection function.** In fact, the enabled clients of document D3 carry out the detection and multimedia player functionality without a corresponding command having been included in the web page by the proxy server.

The Board also does not fully agree with the Examining Division's identification of distinguishing feature (2), but the Board's assessment of inventive step does not hinge on that difference.

6.7 The Examining Division argued that distinguishing feature (1) solved the problem of reducing the burden placed on the server and avoiding the installation of player software at the user device. Faced with this problem, it was **a matter of routine design to include in the additional instructions already provided to a non-enabled network client the detection function and the content adaptation function performed at the proxy server.**

The Board is not convinced by this argument, as it does not accept that the skilled person, as a matter of routine design, would consider modifying a web page to include a command to invoke functionality currently performed at the server. There is no evidence on file that such measures formed part of the common general knowledge of the skilled person.

6.8 The Board also has some doubts regarding the Examining Division's formulation of the technical problem, as claim 1 does not rule out that player software is in some sense installed.

Nevertheless, when the technical problem is formulated as that of **reducing the burden placed on the server or, less ambitiously, as that of providing an alternative mechanism to allow a non-enabled network client to render the multimedia object, the Board finds that the subject-matter of claim 1 is not rendered obvious** by document D3, for the following reasons.

6.9 Faced with either of these problem formulations, the skilled person would have considered moving the detection and transcoding of embedded multimedia objects from the proxy server to the client device. Indeed, document D3 already discloses carrying out this functionality in "enabled" network clients (paragraph [0049]), which therefore place less of a burden on the server than the non-enabled clients.

Document D3 further discloses that a non-enabled client can be turned into an enabled client by letting the HTTP remote proxy include instructions in the web page returned to the

network client that allow the network client to download the specialised client software required by an enabled network client (paragraph [0045]).

However, these instructions included in the web page do not directly cause the web browser to "invoke a program including the detection function". Instead, they provide a user interface that, inter alia, allows the user to download a program including a detection function and multimedia player/content adaptation function by means of a hypertext link. Even if the skilled person would have further automated this download process by replacing the instructions that provide the user interface with instructions that directly download the specialised software to the client, this would have resulted only in the client device becoming an enabled client device for the purpose of the next web page request, not in the client device detecting and converting/transcoding the multimedia objects in the current web page. In other words, the skilled person would not have arrived at the subject-matter of claim 1.

6.10 Hence, document D3 does not render the subject-matter of independent claim 1 and the corresponding independent claims 11 and 12 obvious.

T 2362/13 (Logistics central station/SCHNEIDER LOGISTICS) of 1.9.2020

European Case Law Identifier: ECLI:EP:BA:2020:T236213.20200901

METHOD AND SYSTEM FOR INTERFACING WITH A SHIPPING SERVICE

Inventive step - providing different user interfaces and functions to different classes of users

Inventive step - (no - obvious implementation of non-technical requirements)

Application number: 01977530.3

IPC class: G06F17/60

Applicant name: Schneider Logistics, Inc.

Cited decisions: T 0003/90, T 0641/00, T 0983/11

Board: 3.5.01

<https://www.epo.org/law-practice/case-law-appeals/pdf/t132362eu1.pdf>

Claim 1 of the main request reads:

Logistics central station (144, 108) for controlling transfer, transport, or shipment of a product from a source site to a destination site, said logistics central station comprising:

Examples of recent 2020 Board of Appeals decisions related to Software Innovations

- (i) an interface unit (304) for coupling the logistics central station (108) with at least one remote entity;
- (ii) a digital processing unit (306) coupled to the interface unit (304) for controlling the operation of the logistics central station;
- (iii) a database (308) coupled to the digital processing unit for storing information pertaining to the shipment of a product from the source site to the destination site (106, 102);
- (iv) an interface logic (310, 316) having a first interface and a second interface, the first interface permitting a first class of users to interact with the logistics central station (308) and providing access to a first set of functions, and the second interface permitting a second class of users to interact with the logistics central station (308) and providing access to a second set of functions;
- (v) wherein the first set of functions differs from the second set of functions, and wherein the first set of users are affiliated with the source site (106) and the second set of users are affiliated with the destination site (102).

1. The invention

1.1 The invention concerns a "logistics central station", i.e. a node in a computer system for administering the shipment of products from a source site to a destination site (see item 144 in Figure 1 and item 108 in Figure 3).

1.2 The claimed logistics central station has an interface unit (304) for coupling to other nodes in the computer system, a digital processing unit (306), a database for storing shipment information, and additional functionality including an interface logic (316) for providing a number of interfaces that allow users to interact with the logistics central station and accessing its functions.

1.3 The interface logic (316) provides a first interface allowing a first class of users affiliated with the source site to access a first set of functions, and a second interface allowing a second class of users affiliated with the destination site to access a second type of functions. In other words, the logistics central station provides a different set of functions to the sender and the recipient of the shipment. An example of a sender interface is shown in Figures 9A to E. It includes functions such as shipment confirmation, a view of pending shipments, and the sending of a shipping notice. Figures 10A to E shows an example of the destination interface. It has another set of functions including a "trailer arrival history".

1.4 The application discloses additional user interfaces and their associated functions, provided to other classes of users, for example the "customer view" in Figures 11A to C, and the "logistics view" in Figures 12A and B.

2. Main request, inventive step

2.1 The examining division considered that the claimed invention was an **obvious implementation of a set of administrative functions and business rules on a notoriously known**

networked computer, comprising a network interface unit, a digital processing unit, a database, and a user interface.

The functions in claim 1 were considered to be administrative functions relating to the shipment of products, and providing different functions to different classes of users was considered to be a business rule. Although not explicitly stated, the examining division applied the "COMVIK approach" according to which non-technical features cannot contribute to inventive step (see T 641/00 - Two identities/COMVIK). Instead, the non-technical features are given to the skilled person as a set of requirements to implement.

The implementation of the administrative functions and business rules on the computer was considered to be a normal task for the skilled person in the art of data processing. Furthermore, no interaction was found between the clearly technical features (the computer and its components) and the non-technical features.

2.2 The appellant disputed the examining division's finding that the claimed invention was merely the implementation of a business method on a notorious computer system, and argued that the "logistics central station" was a technical means that solved the technical problem of how to effectively transfer products from source to destination sites.

2.3 The Board is not persuaded by the appellant's arguments. The application does not concern the physical transfer of products; it is about providing access to functions in a computer system. Thus, the Board does not see a basis for the alleged effect in the application as filed.

In any case, the Board does not agree that the transportation of a product from A to B is necessarily technical. It is something that humans often do (for example when dropping off a packet at the post office). Thus, unless it is done in a technical way, using technical means, the transportation of products is not technical. At any rate, technical shipping infrastructure does not lend technical character to the activity of planning and scheduling shipments. Logistics is generally considered as falling within the categories of excluded matter in Article 52(2) EPC (see the Guidelines for Examination, G-II 3.5.3, and T 983/11 - Coordinated marketing/PITNEY BOWES).

2.4 The appellant also argued that the role based user interface was easier to use than a user interface comprising functions for all the roles. Ease of use was a technical effect that counted towards inventive step.

The Board, however, does not agree that removing functions that are irrelevant or inaccessible to the user constitutes a technical solution to a technical problem. It is rather a consequence of the business requirement to provide different functions to different classes of users.

2.5 Thus, the Board agrees with the examining division that the subject-matter of claim 1 of the main request solves the problem of how to implement a set of administrative functions on a computer system. The computer implementation is technical, but, in the Board's view, it would have been obvious for the skilled person.

That **one of the entities in the system is a "central station" does not appear to make any technical difference**, because the **role of the central station in the computer network is not clear**. Indeed, the claim does not specify that the users access the central station from remote locations. **In any case, it would have been obvious to use a centralised approach, because centralised or client-server computer systems were standard at the priority date.**

2.6 For these reasons, the Board judges that the subject-matter of claim 1 of the main request lacks an inventive step (Article 56 EPC).

T 0232/14 (Method and apparatus for identifying, authenticating, tracking and ... of 6.10.2020

European Case Law Identifier: ECLI:EP:BA:2020:T023214.20201006

METHOD AND APPARATUS FOR IDENTIFYING, AUTHENTICATING, TRACKING AND TRACING MANUFACTURED ITEMS

Inventive step - determining ranges of unit identifiers (no

Inventive step - not technical and obvious)

Inventive step - technical effect of saving storage (no

Inventive step - bonus effect)

Application number: 09722519.7

IPC class: G06Q30/00

Applicant name: INEXTO SA

Board: 3.5.01

Catchwords:

The Board judges that using ranges of unit identifiers to label a number of (consecutive) unit identifiers of manufactured items is, at the level of generality at which it is claimed, on the business side of the line between technical and non-technical subject-matter (see e.g. T 144/11 - Security rating System / SATO MICHIIHIRO, points 2.1, and 3.6 to 3.9).(See point 2.5 of the reasons)

The ranges of unit identifiers do have a meaning for the business person. They correspond to batches of units produced on a production line. (See point 2.6 of the reasons)

Even if the "determining of ranges of unit identifiers" achieved a technical effect, such as reducing data storage and data bandwidth requirements, it is a matter of routine design for the skilled person, a software programmer or a database expert, based on common general knowledge to store the first and the last element of a list of items, instead of the whole list. (See point 2.9 of the reasons)

Cited decisions: T 0641/00, T 0144/11, T 1463/11

<https://www.epo.org/law-practice/case-law-appeals/pdf/t140232eu1.pdf>

Independent claim 1 of the main request reads as follows:

"1. A method for identifying manufactured items in containers, each container suitable for containing two or more units, the method comprising the steps of:

at a production line, uniquely identifying each unit by marking each unit with a unique unit identifier;

at the production line, allocating two or more units to be contained in each container;

at the production line, uniquely identifying each container by marking each container with a unique container identifier;

for each container, determining one or more ranges of unit identifiers of the two or more units allocated to the container; and

storing, in a database, a container identifier for each container, each container identifier being coupled, in the database, to the one or more ranges of unit identifiers of the two or more units allocated to the container."

1. Background of the invention

1.1 The invention relates to the identification of specially taxed or branded manufactured items (also called units or cartons, e.g. cigarette cartons), packaged into containers (also called cases). Identification allows products to be authenticated as genuine, tracked and traced, which helps to detect contraband and counterfeit products (paragraph bridging pages 2 and 3 of the original description).

1.2 Conventional identification systems stored an individual record of the identifier for each item in the container together with its associated container identifier (see Table 1). This required a large amount of data storage.

1.3 The invention essentially replaces the individual records with ones representing any contiguous ranges of identifiers for items packed in a container. Since items are generally packed as they are produced, there are fewer ranges than items and thus fewer records in the database.

1.4 In the embodiment partially claimed in auxiliary request 2, the item identifier contains production details (e.g. date and time to the nearest minute) only differing by a count value (e.g. of items produced in the given minute). The ranges are simply stored as records containing the respective production details and the beginning and the end values of the counter together with the corresponding container identifier, as shown in Table 3.

2. Main request

2.1 The examining division refused claim 1 of the main request for a lack of inventive step (Article 56 EPC) over the prior art acknowledged in the description, page 1, line 28, to page 2, line 18, which cites WO 2006/038114. This document corresponds to EP 1 645 992 (D1) which was cited by the examining division.

2.3 It is common ground that claim 1 differs from the closest prior art by the last two features of claim 1, that is, "for each container, determining one or more ranges of unit identifiers of the two or more units allocated to the container" and "storing, in a database, a container identifier for each container, each container identifier being coupled, in the database, to the one or more ranges of unit identifiers of the two or more units allocated to the container."

2.4 However, there is **disagreement whether the determination of ranges of unit identifiers is technical or not.**

The examining division considered this **feature was part of the requirement specification of an administrative scheme for the identification of manufactured items in containers.**

The appellant argued that ranges of unit identifiers did not have a meaning for the business person because they did not exist in the business area. They would be used in combination with production details and only for saving storage space, which was a technical contribution. This further enabled an authentication process to be implemented for products which were produced in very high numbers using standard data processing equipment, paragraph 4.6 of the grounds of appeal. Thus the requirement specification could only be formulated along the lines of "we need an identification and authentication system like we have for products that are shipped in containers, but which can be implemented practically and economically for very high volume units, such as cigarette packs", paragraph 4.5.

2.5 The Board however agrees with the examining division that this **feature belongs to the business specification.** The Board judges that **using ranges of unit identifiers to label a number of (consecutive) unit identifiers of manufactured items is, at the level of generality at which it is claimed, on the business side of the line between technical and non-technical subject-matter** (see e.g. T 144/11 - Security rating System / SATO MICHIHIRO, points 2.1, and 3.6 to 3.9).

2.6 The **ranges of unit identifiers do have a meaning for the business person.** They **correspond to batches of units produced on a production line.** This is apparent from Table 2 of the application, where a first batch is produced at 10:11 and a second batch at 10:12. In Example 1 on page 14 of the application, ranges of counter values correspond to cartons which were produced in the same time period. In Example 3 on page 15, the ranges correspond to cartons produced in batches of different production lines. In Example 2 on page 15, the ranges correspond to as many individual cartons as are packed together into one shipping case. The ranges of unit identifiers in all examples are not different from the general understanding of what a batch is in production, see, for example, D1, paragraph [0023]. Therefore the determination of ranges of unit identifiers is rather linked to the number of possible ways of organising items of a group of items based on how they are produced, that is, the number of batches, than to the way in which data can be stored.

2.7 The Board agrees with the examining division that the use of an (electronic) database for the storage of data, that is, the ranges of unit identifiers, was a straight-forward consequence of the requirement specification when implementing it on a data processing system, such as the one cited in the prior art. An (electronic) database was known in the prior art, for example, from WO 2006/038114, page 7, lines 5 to 11, and D1, paragraphs [0031] to [0032], where a checking center 30 receives and centralises product data, and has access to database 31, page 15, lines 13 to 15, and D1, paragraph [0065]. The person skilled in the art when implementing the business requirements would straight-forwardly store in the database a container identifier for each container, each being coupled, in the database, to the one or more ranges of unit identifiers allocated to the container. **The saving in storage space is a mere "bonus effect".**

2.8 The Board therefore concludes that the subject-matter of claim 1 of the main request lacks an inventive step (Article 56 EPC).

2.9 The Board does not come to a different conclusion even if the "determining of ranges of unit identifiers" achieved a technical effect, such as reducing data storage and data bandwidth requirements.

It is a matter of routine design for the skilled person, a software programmer or a database expert, based on common general knowledge to store the first and the last element of a list of items, instead of the whole list. If a list comprised non-consecutive numbers with numbers missing, then the skilled person would recognise without requiring inventive skills that several ranges can be defined to exclude the missing numbers. In an example of a list of items ranging from 1 to 50 with missing numbers 11, 12, 33, 34 and 35, the skilled person would store three ranges from 1 to 10, 13 to 32 and 36 to 50.

T 2314/16 (Distributing rewards by assigning users to partial advertisement ... of 7.9.2020

European Case Law Identifier: ECLI:EP:BA:2020:T231416.20200907

INFORMATION PROVIDING DEVICE, METHOD OF PROCESSING REWARD PAYMENT, REWARD PAYMENT PROCESSING PROGRAM, AND RECORDING MEDIUM WITH REWARD PAYMENT PROCESSING PROGRAM RECORDED THERON

Technical effect - reduced computational load (no - technical, but no embodiment to enable verification)

Inventive step - distributing rewards by assigning users to partial areas of an advertisement banner (yes - Inventive step - involves technical considerations of the web page system)

Application number: 11800813.5

Examples of recent 2020 Board of Appeals decisions related to Software Innovations

IPC class: G06Q50/00, G06Q30/00, G06Q30/02

Applicant name: Rakuten, Inc.

Board: 3.5.01

Catchwords:

The specification of the business method ended with how to determine the reward distribution ratio. The features of dividing the advertisement display area into partial areas and allocating each partial area to a user such that when the partial area is clicked on the user gets a reward, were based on technical considerations of the web page system. It was not motivated by any business considerations.

...

In order to come up with this idea, one needs to understand how a web site is built, and in particular how an image map works. Thus, this feature cannot be part of the non-technical requirements. Instead it is part of the solution that has to be evaluated for obviousness. (See point 2.10 of the reasons)

Cited decisions: G 0003/08, T 0792/92, T 0641/00, T 0258/03, T 0154/04, T 1755/10,
T 1463/11

<https://www.epo.org/law-practice/case-law-appeals/pdf/t162314eu1.pdf>

Claim 1 of the main request reads:

An information providing device which provides display data including an advertisement display area, to a terminal device through a network, the information providing device comprising:

a user information memory means that associates and stores coordinate information of a partial area included in the advertisement display area, and user specifying information for specifying a user, per partial area;

a transmitting means that transmits display data including the advertisement display area, to the terminal device;

a position information acquiring means that acquires a coordinate on a web page specified in the advertisement display area, from the terminal device;

a partial area specifying means that by comparing coordinate information of each partial area with the acquired coordinate, specifies the partial area including the coordinate; and

a reward information memory means that specifies the user based on the partial area specified by the partial area specifying means and the user specifying information in the user information memory means, and associates and stores information of a reward paid for the specified user.

1. The invention

1.1 The invention concerns the distribution of rewards to participants in an affiliate marketing scheme.

Affiliate marketing is an advertising model in which an influencer receives a reward for advertising a product or service, for example by including a link on a blog or endorsing a product on social media.

1.2 In the invention, participating influencers (called users in claim 1) are each allocated a portion of an advertisement banner displayed on a web site (Figures 5A and 5B). The user areas are not visible to the visitor of the web site; the visitor just sees an advertising banner. When the visitor clicks on the banner, the user whose portion was clicked on gets a reward. Over time, the rewards will be distributed according to the sizes of the image portions. The idea is to allocate the partial areas such that the reward distribution rates match the degree of contribution of each user to the advertising of the product or service.

1.3 Claim 1 is directed to an information providing device which provides display data including an advertisement display area to a terminal device through a network. In plain words, this means a web server which provides a web page with an advertisement banner.

The web server receives a coordinate from the client terminal device, finds the partial area including the coordinate by comparing the received coordinate with stored coordinate information of the partial areas, and specifies the user that is to receive a reward by looking at stored user specifying information that associates a user with each partial area.

2. Inventive step

2.1 The examining division assessed inventive step starting from the server-side image map feature in HTML. Server- side image maps allow the web browser to send coordinate information to the web server indicating where the user clicked in an image. The server may use the coordinate information to determine e.g. the content to return.

2.2 The examining division found that the claimed invention differed from the server-side image map by (i) the image being an advertisement, and (ii) by the server specifying the user who gets a reward based on the received coordinate information associated with a partial area.

The examining division **could not derive any technical problem from the distinguishing features**. Those features were rather **considered to define business steps implemented on the known web page infrastructure**. The examining division argued that the implementation **did not go beyond a mere automation of the business-related aspects**, and that it would have been obvious to the skilled person. For these reasons, an inventive step was denied.

2.3 The appellant argued that the invention produced a technical effect which went beyond the mere implementation of a business method, namely reducing the processing load for calculating the reward rates. While other methods of allocating rewards required division for calculating the reward distribution rates, each being a fraction of the overall reward, the invention avoided such expensive calculations by specifying the recipient of the reward based

on the selection of a partial area. For example, the calculation of the distribution rates for the five users shown in Figure 5B would, in the prior art, have required five divisions, whereas the invention avoided divisions altogether. The effect of reducing the processing load was also mentioned in the application at the end of paragraph [0112], and should be taken into account in the assessment of inventive step.

2.4 The appellant furthermore argued that the examining division had not given reasons why it considered certain features of the invention to be non-technical.

Whether or not a feature had technical character was a crucial point of the inventive step assessment since the non-technical features were allowed to appear in the problem statement. In the appellant's view, neither the EPC, nor the case law, provided any definitions or guidance as to which features should be regarded as technical or not.

2.5 It is common ground that the subject-matter of claim 1 contains a mixture of technical and non-technical features. The information providing device is clearly a technical device whereas the distribution of rewards to influencers is a business idea.

...

2.6 The appellant is correct in that there is no positive definition of 'technical' in the EPC.

However, Article 52(2) EPC provides a non-exhaustive list of subject-matter that should not be regarded as technical inventions, for example "schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers" (Article 52(2)(c) EPC).

Also, over the years, the case law has provided further guidance on the issue of technicality. In COMVIK, a technical feature was defined as a feature which contributed to the solution of a technical problem by providing a technical effect (reasons, point 6). Thus, features which are prima facie non-technical may interact with the technical subject matter of the claim so as to produce a technical effect (T 154/04 - Estimating sales activity/DUNS LICENSING ASSOCIATES, reasons points 13 and 15). The technical effect must be actually achieved by the feature in question, and it must not be a mere consequence of a modified business scheme (see T 258/03 - Auction method/HITACHI, which held that method steps consisting of modifications to a business scheme and aimed at circumventing a technical problem rather than solving it by technical means could not contribute to the technical character of the subject-matter claimed).

2.7 In the field of computer-implemented methods, the technical effect of the invention is often its implementation on technical means. In such cases, it is not always straightforward to determine which features contribute to the implementation, and which features are part of the non-technical requirements to be implemented. Generally speaking, features which are based on technical considerations of the technical system on which the requirements are implemented have technical character and thus may contribute to inventive step (T 792/92 - General purpose management system). However, pure software concepts do not contribute to the technical implementation, because programs for computers are excluded matter under

Article 52(2) EPC (T 1755/10 - Software structure/TRILOGY, reasons point 6, and G 3/08 - Programs for computers, point 13.5).

2.8 In T 1463/11 (Universal merchant platform/CardinalCommerce), the Board introduced the concept of the notional business person to help separate business considerations and technical considerations. The business person, who is just as fictional as the skilled person in Article 56 EPC, may formulate business requirements but will not include any technical matter. This approach ensures that, in line with the Comvik approach, all the technical matter, including known or even notorious matter, can contribute to inventive step and is therefore considered for obviousness.

2.9 Coming back to **the technical effect of reducing the processing load, which is indeed a technical effect** that **could potentially support the presence of an inventive step**, the **Board is not persuaded that it is actually achieved**. There are two reasons for this.

Firstly, **the effect is not derivable based on a comparison between the claimed invention and the starting point in the prior art**. In the problem and solution approach, the objective technical problem is formulated based on the difference between the claimed subject-matter and the prior art chosen as the starting point (the closest prior art). In the present case, **the starting point is a server-side image map**. The effect of reducing the computational load is based on a comparison between the claimed invention and another, hypothetical method of distributing rewards. Since the **effect cannot be derived from the difference between the claimed invention and the server-side image map, it cannot form the basis of the technical problem**. Thus, in the Board's view, the technical problem vis-à-vis the server-side image map is merely the implementation of the reward calculation.

Secondly, **even compared with a method of calculating rewards using division, the invention does not contain enough technical detail to credibly achieve the effect argued by the appellant**. For there to be a reduction in processing load, the computational savings of avoiding division must outweigh the complexity introduced by processing image maps. Since the application does not contain any detailed embodiment of the server-side processing of coordinate information, it is not clear that there is a reduction in computation load, let alone a reduction over the whole scope claimed. This shows the importance of including an embodiment in support of the technical effects relied on, because this might enable them to be verified.

2.10 Having established that the technical problem is the implementation of the reward distribution, the question remains **which features are part of the requirement specification and which features are part of the technical implementation**.

The appellant argued that the specification of the business method ended with how to determine the reward distribution ratio. The features of dividing the advertisement display area into partial areas and allocating each partial area to a user such that when the partial area is clicked on the user gets a reward, were based on technical considerations of the web page system. It was not motivated by any business considerations.

The Board agrees with the appellant that the allocation of users to partial image areas is not within the domain of the business person. In order to come up with this idea, one

needs to understand how a web site is built, and in particular how an image map works. Thus, this feature cannot be part of the non-technical requirements. Instead it is part of the solution that has to be evaluated for obviousness.

2.11 Starting from the HTML server-side image map and given the problem of implementing the business requirement of distributing rewards to a number of users according to certain reward distribution rates, the Board judges that it would not have been obvious to assign users to partial areas of an image as in claim 1. Although the means for implementing this was available in HTML, there was no motivation for the skilled person to do so. Accordingly, the subject-matter of claim 1 involves an inventive step (Article 56 EPC).

T 0886/14 (Lottery game/Al-Ziyoud, Aiman H.) of 16.11.2020

European Case Law Identifier: ECLI:EP:BA:2020:T088614.20201116

LOTTERY SYSTEM AND METHOD WITH REAL-TIME PROGRESSIVE JACKPOT

**Inventive step - implementing progressive jackpot lottery game
(no Inventive step - obvious implementation of non-technical game rules)**

Application number: 04731698.9
IPC class: G06Q10/00
Applicant name: Al-Ziyoud, Aiman H.
Cited decisions: T 0641/00, T 0172/03, T 0258/03

Board: 3.5.01

<https://www.epo.org/law-practice/case-law-appeals/pdf/t140886eu1.pdf>

Claim 1 of the main request reads:

A data processing system for implementing a lottery, including:

an input terminal operable to receive data comprising a lottery sales amount corresponding to one or more customer lottery purchase orders from a remote communication device via a public telecommunications network;

a data storage means for storing received [sic]; and

a server operable to communicate with said remote communications device over said public telecommunications network

wherein said data processing system is configured to store a latest lottery prize amount value having a [sic] least partial dependence on said received data;

said data processing system configured to update automatically said latest lottery prize amount value responsive to and on at least partial dependence on update data received by said input terminal; and

configured to communicate said updated latest lottery prize amount value over said public telecommunications network to a presentation device automatically when the said latest lottery prize amount value has been updated.

1. Background

The invention concerns a system for playing a lottery game having a progressive accumulative jackpot. In this type of lottery, the jackpot grows with the sale of each lottery ticket, because a portion of the purchase price for a lottery ticket goes into the jackpot. The jackpot grows until the drawing date of the lottery when the jackpot is distributed to the winner or winners (see page 2, lines 4 to 12 of the published application).

The lottery system described in the application (see Figures 1B and 1C) comprises a central lottery system (32, 102) connected to a number of remote communication devices (38, 108) via a public telecommunications network (page 13, lines 1 to 14).

A player wishing to participate in the lottery game uses his communication device to request a lottery ticket from the central lottery system (page 15, lines 15 to 20). The central lottery system comprises an input terminal (116), e.g. a web server, for receiving the request from the remote communication device (page 13, lines 1 to 13 and lines 15 to 20), a central server (120), and a database (118) for storing the jackpot size (page 10, lines 23 to 28; page 12, lines 1 to 8; and page 13, lines 8 to 12).

Having received the ticket request, the central lottery system assigns the requested number of lottery tickets to the player and bills him. Next, the system updates the jackpot size in the database by adding to the jackpot (a portion of) the price of the purchased tickets (page 12, lines 4 to 8 and page 13, line 27 to page 14, line 8). The updated jackpot amount is, then, provided to the central server, which transmits it to a presentation device for display (page 12, line 8 to 10).

2. Article 56 EPC, claim 1 of the main request

2.1 The examining division refused the application for lack of inventive step. They considered that **claim 1 then on file addressed the problem of defining rules for playing a game, automation of administrative methods, and presenting information**. They held that the implementation of these aspects included the use of a conventional networked computer system comprising a server which ran a game and updated a jackpot value, a remote communication device and a conventional database. The **skilled person would have applied the game rules and carried out the administrative steps without the use of inventive skill**.

2.2 The Board agrees with the examining division that a conventional client/server system is an appropriate starting point for assessing inventive step. In such a system, multiple client computers connect via a public telecommunications network to a central server computer to use its resources. The central server computer comprises storage means and runs a server process which communicates with client processes running on the client computers. Thus, the conventional server computer corresponds to the input terminal in claim 1; the server process running on the central server computer corresponds to the server in claim 1. The client computers accessing the server and presenting data received from it correspond to the remote communication devices and the presentation device in claim 1.

The Board considers that the subject-matter of claim 1 of the main request differs from the conventional client/server system in that the server receives, from the remote client, one or more lottery purchase orders, stores the accumulated jackpot amount ("latest lottery prize amount" in claim 1), updates the jackpot amount automatically based at least partially on the received lottery purchase price, and provides the updated jackpot value to a presentation device automatically when the jackpot value has been updated.

The appellant argued that the claim defined an asymmetric information path between a user and the server. More specifically, the user inputting the lottery purchase order to the server did not receive the latest jackpot amount; the jackpot amount was instead broadcast to prospective users via television, radio, or a website. This was a difference over the conventional client/server system where data exchanged between a client and a server always followed a symmetrical path.

In the Board's view, however, the **claim does not exclude that the remote communication device and the presentation device is one and the same device**. Indeed, according to the application (see page 12, lines 21 to 22 and lines 25 to 26), the presentation device can be a computer device providing displaying capabilities.

In any case, the **presentation is not limited to television, radio, or a website**. Furthermore, the **claim wording covers not only broadcast but also unicast and multicast**. Therefore, the **Board does not agree that the alleged asymmetry is present in claim 1**.

2.3 **In any case, the Board considers that the requirement that the jackpot value be provided to all players, including prospective players, is a non-technical one.**

Like the examining division, the Board takes the view that the claimed subject-matter aims at **implementing a method for playing a lottery game, which, when taken as such, would be excluded from patentability pursuant to Article 52(2)(c) and (3) EPC**.

The **non-technical method of playing a lottery game** comprises:

- One or more players request and purchase one or more lottery tickets.
- The lottery is organised by a lottery organiser.
- The lottery scheme includes adding a portion of the purchase price to an accumulative jackpot.

- Each time the jackpot value is increased, it is immediately notified to the requesting lottery player or all lottery players.

Under the COMVIK approach (see decision T 641/00) the non-technical features cannot contribute to inventive step.

2.4 The appellant argued that the claimed invention produced a number of technical effects:

The server transmitted only the updated jackpot value which avoided a wasteful and redundant transmission of values that have already been transmitted.

Furthermore, the server provided the updated jackpot value in real-time and not following some delay. As a result, the **technical effect of reducing latency in data transmission was provided**.

2.5 The Board considers, however, that the effects advanced by the appellant are **not (further) technical effects** counting towards inventive step. The non-technical method includes that a jackpot value should be provided without delay when it is updated. It follows that the **effects advanced by the appellant result from the lottery method per se rather than from its technical implementation**. The technical implementation is only claimed in functional terms and there are no details of how it is actually achieved. Hence, **at the level of detail of claim 1, the advanced effects of reducing latency and redundancy are not further technical effects which could give rise to an objective technical problem**. Furthermore, any asymmetric information exchange would also be a direct result of the non-technical requirement that the jackpot value should be provided to all players.

The Board notes that this finding is in line with the established case law represented i.a. by decision T 258/03 (see points 5.6 to 5.7 of the reasons) and decision T 172/03 (see point 22 of the reasons).

2.6 In the appellant's opinion the objective technical problem is "how to provide a platform for the implementation of a lottery capable of providing both participants and prospective participants real-time data about the jackpot total".

The Board considers, however, that **this problem is not correct** as, contrary to the COMVIK-principle, it does not comprise all parts of the above non-technical method for playing a lottery game. In line with the COMVIK-principle, this method cannot contribute to inventive step and is instead provided in its entirety to the technically skilled person as part of the framework of the objective technical problem. Hence, in the Board's judgement, the skilled person faces the objective technical problem of implementing the lottery method on the conventional client/server system.

2.7 The Board considers that the **claimed implementation would have been obvious to the skilled person facing the above problem**. In particular, it would have been obvious to implement the lottery game functionality including maintaining and updating a jackpot at the central server. Indeed, **it is already given as part of the game rules that the lottery is organised centrally**. It would also have been obvious to implement functionality for

requesting tickets at client computers connected to the server; this could be done for example using web page forms provided from the server to the remote devices. Finally, providing the jackpot value to all participating players could be straightforwardly accomplished for example by sending automatically generated emails to all players' client computers and by displaying their content.

2.8 The appellant argued that it would not have been obvious at the priority date to present the exact value of the updated jackpot, because lottery systems known at that time rather presented an estimated jackpot amount.

However, the question whether the skilled person would consider notifying the exact value of the updated jackpot to players in real-time does not arise here, because that has already been decided in formulating the objective technical problem. Therefore, the skilled person would seek to provide such functionality because the problem requires him to do so regardless of whether lottery schemes adopted this solution at the priority date or not. The only question is how it would be done, but, as outlined above, the Board considers the claimed implementation to be obvious.

2.9 For these reasons, the Board judges that the subject-matter of claim 1 of the main request lacks an inventive step (Article 56 EPC).

3. Since the main request corresponds, in essence, to the refused main request in the decision under appeal, there are no special reasons present necessitating a remittal to the examining division (Article 11 RPBA).

T 2379/16 () of 11.9.2020

European Case Law Identifier: ECLI:EP:BA:2020:T237916.20200911

Verfahren zur Ermittlung einer Vergleichbarkeit von Dienstleistungsangeboten oder Produkten

Erfinderische Tätigkeit - (nein)

Anmeldenummer: 09000216.3

IPC-Klasse: G06Q10/00

Verfahrenssprache: DE

Name des Anmelders: Laurini, Frank

Angeführte Entscheidungen: G 0003/08, T 0641/00, T 0643/00, T 0619/02, T 0172/03,
T0258/03, T 0306/04, T 0336/07, T 1670/07

Kammer: 3.4.03

<https://www.epo.org/law-practice/case-law-appeals/pdf/t162379du1.pdf>

Hauptantrag:

(A) Verfahren zur Bereitstellung von Bewertungen für personenbezogene Plätze (24) und/oder Platzbereiche (26, 28),

(B) mit einem Datenverarbeitungssystem (32) mit wenigstens einer Rechneinheit (32), einer Speichereinheit (30), einer Ein- / Ausgabereinheit (36) sowie einem Kommunikationsnetzwerk (34),

(C) wobei dem Platz (24) und/oder Platzbereich (26, 28) eine individualisierende Identifikation zugewiesen ist, (D) wobei mittels der Ein- / Ausgabereinheit (36) Bewertungen von Qualitätsmerkmalen gemäß einem festgelegten Bewertungsmaßstab des Platzes (24) und/oder Platzbereichs (26, 28) abgegeben und platz- oder platzbereichsbezogen und qualitätsmerkmalsbezogen gespeichert werden,

(E) wobei die Bewertungen mittels eines Algorithmusses verarbeitbar sind und ein Ergebnis speicherbar und mittels der Ein- / Ausgabereinheit (36) bezogen auf ein gewähltes Qualitätsmerkmal nutzerspezifisch abrufbar ist.

2. Die beanspruchte Erfindung

Es wird ein dynamisches Online-Reservierungssystem für Events vorgeschlagen, bei dem Kunden online Qualitätsbewertungen für Sitz- und Stehplätze abgeben können. Diese Bewertungen stehen dann bei der Platzwahl während der Online-Reservierung allen Kunden zur Verfügung (siehe Absätze [0004] bis [0006] der veröffentlichten Anmeldung).

3. Hauptantrag - erfinderische Tätigkeit

3.1 Nächstliegender Stand der Technik

...

3.1.2 Die Kammer teilt die Auffassung der Prüfungsabteilung, dass der nächstliegende Stand der Technik ein allgemein bekanntes netzbasiertes Computer-System ist, so dass sich für die Beurteilung der erfinderischen Tätigkeit das Heranziehen eines Dokuments erübrigt.

3.2 Bekannte Computer-Systeme

3.2.1 Die Kammer identifiziert folgende bekannte technischen Merkmale eines netzbasierten Computer-Systems:

(B) Datenverarbeitungssystem (32) mit wenigstens einer Rechneinheit (32), einer Speichereinheit (30), einer Ein- / Ausgabereinheit (36) sowie einem Kommunikationsnetzwerk (34),

(D) wobei mittels der Ein- / Ausgabereinheit (36) [deleted: Bewertungen von Qualitäts]merkmale[deleted: n gemäß einem festgelegten Bewertungsmaßstab des Platzes

(24) und/oder Platzbereichs (26, 28) abgegeben und platz- oder platzbereichsbezogen und qualitätsmerkmalsbezogen gespeichert werden,

(E) [deleted: wobei] die [deleted: Bewertungen] mittels eines Algorithmusses verarbeitbar sind und ein Ergebnis speicherbar und mittels der Ein- / Ausgabeeinheit (36) [deleted: bezogen auf ein gewähltes Qualitätsmerkmal] nutzerspezifisch abrufbar ist.

3.2.2 Folgende, hauptsächlich "**nichttechnischen**" **Merkmale**, können identifiziert werden, die **in einem solchen Computer-System leicht implementierbar** sind, aber eine **Geschäftsmethode** betreffen:

(A') Verfahren zur Bereitstellung von Bewertungen für personenbezogene Plätze (24) und/oder Platzbereiche (26, 28),

(C') wobei dem Platz (24) und/oder Platzbereich (26, 28) eine individualisierende Identifikation zugewiesen ist, (D') wobei [deleted: mittels der Ein- / Ausgabeeinheit (36)] Bewertungen von Qualitätsmerkmalen gemäß einem festgelegten Bewertungsmaßstab des Platzes (24) und/oder Platzbereichs (26, 28) abgegeben und platz- oder platzbereichsbezogen und qualitätsmerkmalsbezogen gespeichert werden,

(E') wobei die Bewertungen [deleted: mittels eines Algorithmusses] verarbeitbar sind und ein Ergebnis [deleted: speicherbar und mittels der Ein-][deleted: /][deleted: Ausgabeeinheit (36)] bezogen auf ein gewähltes Qualitätsmerkmal nutzerspezifisch abrufbar ist.

3.2.3 Diese **Verfahrensschritte könnten auch beim Schalter-Verkauf durch die Erfahrung und das Kunden-Feedback der Verkäuferin/ des Verkäufers durchgeführt werden**, wobei das **Speichern und der Algorithmus rein mental durchgeführt** werden. In der Regel finden solche Beratungsgespräche bei einem Schalter-Verkauf statt. Die Merkmale (A') und (C')-(E') sind nicht für ein webbasiertes Computersystem allgemein bekannt.

3.3 Technische Wirkung

3.3.1 Als technische Wirkung der Unterscheidungsmerkmale (A') und (C')-(E') wurde von der Beschwerdeführerin definiert, dass eine **dynamisierte, Qualitäts-optimierte Platzauswahl beim Ticketverkauf** verwirklicht werden könne.

3.3.2 Im vorliegenden Fall ergibt sich allerdings die Aufgabenstellung nicht alleine aus dem Motiv und der zu erzielenden Wirkung, sondern gemäß T641/00 auch **durch die Merkmale, die nicht zum technischen Charakter der Erfindung beitragen, sogenannte "nichttechnische" Merkmale**. Es ist unstrittig, dass Merkmale (A') und (C')-(E') durch eine Verwirklichung auf einem Computer-System technisch werden und der Gesamtgegenstand der Merkmale (A)-(E) technisch ist. Wie oben diskutiert beziehen sich jedoch **Merkmale (A') und (C')-(E') auf eine Geschäftsmethode, die den Verkauf von Event-Tickets betrifft und auch ohne einen Computer durchgeführt werden kann**.

3.3.3 Das **Erzeugen von Metadaten und dynamische Qualitätsbewertungen durch Kunden über die Eigenschaften von Plätzen und Platzkategorien haben**

nichttechnischen Charakter und sind als solche ohne technischen Zusammenhang durch Artikel 52(2)(c)EPÜ ("geschäftliche Tätigkeiten") von der Patentierbarkeit ausgeschlossen.

3.3.4 Im Zusammenhang mit technischen Merkmalen, wie z.B. einem Computer-System, können diese Merkmale durchaus Bestandteile einer patentierbaren Erfindung sein, werden in der Regel aber nicht zur erfinderischen Tätigkeit beitragen können, da nur Merkmale, die einen Beitrag zum technischen Charakter der Erfindung leisten, zu der Lösung einer technischen Aufgabe beitragen können.

3.3.5 Die **Merkmale, die keinen Beitrag zum technischen Charakter leisten, werden bei der Beurteilung der erfinderischen Tätigkeit als eine zwingend zu erfüllende Vorgabe in die Formulierung der technischen Aufgabe aufgenommen** (siehe unter anderem G3/08, T641/00, Rechtsprechung der Beschwerdekammern, 9. Auflage, Abschnitte I.D.9.1.2- I.D.9.1.4). Folglich können die nichttechnischen Merkmale (A') und (C')-(E') in die Aufgabenformulierung aufgenommen werden.

3.4 Objektive technische Aufgabe

3.4.1 Die Beschwerdeführerin hat argumentiert, dass die Erfassung von Daten mittels eines Computers, die bestimmungsgemäße Verarbeitung dieser Daten zur Ermittlung von Ergebnissen, die Bereitstellung einer Abfragemöglichkeit und die Ausgabe von abgefragten Ergebnissen grundsätzlich als technisch anzusehen seien. Es sei ohne Zweifel eine technische Aufgabe, bestimmte ausgewählte Qualitätsmerkmale nutzerspezifischer Art abrufbar bereitzustellen.

3.4.2 Die Beschwerdeführerin argumentiert weiter, dass es Aufgabe der Erfindung sei, eine Bewertungsmethode bereitzustellen, die für Kunden grundsätzlich eine Entscheidungsgrundlage darstellen kann. Dies sei eine technische Aufgabe.

3.4.3 Die **Kammer stimmt darin überein, dass die Aufgabe insgesamt technisch ist**. Die Kammer stimmt jedoch auch mit der Argumentationslinie der Prüfungsabteilung überein, dass die **zu lösende Aufgabe größtenteils nichttechnische Elemente zu enthalten habe, nämlich eine genaue und detaillierte Qualitätsbewertung von Platzkategorien zu ermöglichen**.

3.4.4 Die Kammer ist der Meinung, dass eine **Bewertungsmethode zur Qualitätsbewertung an sich technisch sein kann, z.B. als Teil eines industriellen Herstellungsprozesses**. Im vorliegenden Fall bezieht sich **allerdings die Bewertungsmethode auf eine Geschäftsmethode zum Verkauf von Eintrittskarten, so dass die Kammer bei den beanspruchten Verfahrensschritten der Bewertungsmethode keinen Beitrag zum technischen Charakter sehen mag** (siehe z.B. T619/02, Gründe 2.2).

3.4.5 Wenn wie im vorliegenden Fall die **nichttechnischen Merkmale (A') und (C')-(E')** im Zusammenhang mit einer Geschäftsmethode stehen und somit nicht zum technischen Charakter der Erfindung beitragen, können sie **in die Formulierung des Problems als nichttechnische Teilaufgaben miteinbezogen** werden.

3.4.6 Diese **objektive technische Aufgabe** lautet im vorliegenden Fall:

Computer-implementierte Verwirklichung einer dynamisierten, Qualitäts-optimierten Platzauswahl durch ein webbasiertes computerimplementiertes Verfahren zur Bereitstellung von Bewertungen für personenbezogene Plätze und/oder Platzbereiche, wobei dem Platz und/oder Platzbereich eine individualisierende Identifikation zugewiesen ist, wobei Bewertungen von Qualitätsmerkmalen gemäß einem festgelegten Bewertungsmaßstab des Platzes und/oder Platzbereichs abgegeben und platz- oder platzbereichsbezogen und qualitätsmerkmalsbezogen gespeichert werden, wobei die Bewertungen mittels eines Algorithmusses verarbeitbar sind und ein Ergebnis bezogen auf ein gewähltes Qualitätsmerkmal nutzerspezifisch abrufbar ist.

3.5 Offensichtlichkeit

3.5.1 Aus der Problemstellung ergibt sich sowohl die Motivation als auch die Lösung der beanspruchten Erfindung, da eine webbasierte Implementierung der oben beschriebenen Geschäftsmethode allein durch das allgemeine Fachwissen naheliegend ist.

3.5.2 Die Prüfungsabteilung argumentierte hierzu, dass der Gegenstand des Anspruchs 1 sich im wesentlichen auf rein geschäftsbezogene Schritte beziehe, wobei von einer technischen Infrastruktur (Computersystem) Gebrauch gemacht wird. Der technische Gehalt des Verfahrens gemäß Anspruch 1 beruhe auf der Benutzung der folgenden technischen Infrastruktur: Ein Datenverarbeitungssystem mit wenigstens einer Rechneinheit, einer Speichereinheit, einer Ein-/Ausgabeeinheit und einem Kommunikationsnetzwerk, wobei mittels der Ein-/Ausgabeeinheit Informationen abgegeben und gespeichert werden, wobei die Informationen verarbeitbar sind und ein (kognitives) Ergebnis speicherbar und mittels der Ein-/Ausgabeeinheit abrufbar ist.

3.5.3 Die Kammer stimmt dieser Argumentation zu und ist auch der Meinung, dass zudem keine unerwartete technische Lösung sowohl zur technischen als auch zur nichttechnischen Teilaufgabe vorgeschlagen wird. Es ist zudem kein technischer Beitrag ersichtlich, der dem Fachmann unerwartet oder überraschend erscheinen würde (T258/03, T172/03 und T641/00).

3.5.4 Der erfinderische Schritt kann nur auf der besonderen Art der Umsetzung eines nichttechnischen Gegenstands beruhen (siehe T336/07, Catchword 1 und 2). **Bei der Umsetzung der Lösung zu obiger Aufgabe wird über eine reine Computer-Implementierung hinaus keine Lösung angeboten, die eine zusätzliche technische Wirkung oder spezielle technische Vorteile hat.** Solche Effekte könnten durch eine Anpassung der Hardware, der Ein-/Ausgabevorrichtungen oder spezielle Datenbankenstrukturen und deren Verknüpfung erzielt werden. Auch bei elektronischen Zahlungssystemen, die einem rein kommerziellen Zweck dienen, gibt es bei solchen technischen Merkmalen, die über eine reine Computerimplementierung hinausgehen, patentierbare Materie.

3.5.5 Die Beschwerdeführerin hat argumentiert, dass laut T643/00 auch die Verarbeitung und Darstellung von Informationen als technisch betrachtet werden könne. Technisch anerkannte Lösungen könne es auch zu nichttechnischen Motiven geben. Die Anpassung der Raumtemperatur gehe z.B. auch auf ein subjektives individuelles Empfinden als Grundbedürfnis für eine zu lösende Aufgabenstellung zurück. Das Gleiche gelte auch für die Einstellung der Sitze bei einem Automobil. Es sei nicht ausschlaggebend, ob das Motiv technisch oder nichttechnisch sei, sondern es gehe um deren Durchsetzung und

Verwirklichung. Die Umsetzung des Verfahrens sei eindeutig technisch. Es müsse differenziert werden zwischen dem technischen Verfahren bzw. der technischen Aufgabe und dem nichttechnischen Motiv.

3.5.6 In der Entscheidung T643/00 sei auch der Darstellung von Information eine technische Wirkung zugesprochen worden. Im vorliegenden Fall werde auch Information zur Qualitätsbewertung in einem technischen Rahmen dargestellt. Die technische Wirkung sei, dass eine qualitätsoptimierte Auswahl von Sitzplätzen möglich sei. Der Beschwerdeführer argumentiert weiter, dass die Lösung der Aufgabe also einem technischen Zweck diene. Damit werde die Aufgabe der Dynamisierung des Ticket-Verkaufs in erfinderischer Weise gelöst.

3.5.7 Die Kammer sieht jedoch im vorliegenden Fall einen **rein kommerziellen Zweck**. Zudem **reicht gemäß der T306/04 die bloße Möglichkeit, einem technischen Zweck zu dienen oder ein technisches Problem zu lösen nicht aus**, um einen Ausschluss nach Artikel 52(2) und (3) EPÜ zu vermeiden. Die T1670/07 kommt zu einem ähnlichen Ergebnis.

3.5.8 In der T619/02 wurde entschieden, dass **menschliche Wahrnehmungsphänomene nicht als technischer Natur qualifiziert werden können** (Punkt 2.3.2). Unter Punkt 2.6.2 wurde entschieden, dass **weder die Tatsache, dass das Ergebnis einer Methode bei einer technischen oder industriellen Tätigkeit verwendbar sein kann, noch die Tatsache, dass das Ergebnis als nützlich, praktisch oder verkäuflich qualifiziert werden kann, eine ausreichende Bedingung ausdrückt, um den technischen Charakter des Ergebnisses der Methode oder der Methode selbst festzustellen**. Unter Punkt 4.2.1 und 4.2.2 wurde festgestellt, dass, wenn abgesehen von einer möglicherweise kommerziell vielversprechenden, aber rein ästhetischen oder emotionalen und daher technisch willkürlichen Wirkung die Unterscheidungsmerkmale einer Erfindung gegenüber dem nächstliegenden Stand der Technik im Zusammenhang mit der beanspruchten Erfindung keine technische Funktion erfüllen oder eine technische Wirkung erzielen, kein spezifisches objektives Problem technischer Art als durch die Erfindung gelöst angesehen werden kann.

3.5.9 Fazit: Folglich ist die Kammer wie schon in ihrer Ladung zur mündlichen Verhandlung der Meinung, dass die Umsetzung der Merkmale (A') und (C')-(E') routinemäßig im Computer implementiert wird und **naheliegend** im Sinne von Art 52 und 56 EPÜ ist.