This document includes some recent decisions of the EPO in 2011 with regards to software related inventions and shows relevant extracts from the respective decisions.

T 1244/07 (1-Click/AMAZON), 27.1.2011
Method and system for placing a purchase order via a communications network

inventive step - use of cookie to look up customer data (no - obvious from D1 and D3)

Inventive step - enabling single-action ordering (no - shift of responsibility for security is form of human behaviour not contributing to inventive step)

Long felt want (no - immediate application of newly available programming feature)

Inventive step - omitting confirmation steps in an ordering process (no - aspect of business method)

Inventive step - combining orders sent within a certain time (no - administrative rule)

Inventive step - displaying indication that single-action order can be cancelled within a predetermined time period (no - presentation of administrative information)

http://www.epo.org/law-practice/case-law-appeals/pdf/t071244eu1.pdf

The application is a divisional application derived from and essentially identical to the original parent "1-click" application, which was withdrawn. It relates to purchasing an item over the Internet in a single action.

The application describes online shopping where the user must somehow select items (e.g. using the "shopping cart" model) and then complete the order with personal information (e.g. address and credit card information). The invention sets out to reduce the number of user interactions involved in selecting items and also to reduce the amount of sensitive information sent over the Internet, which may be intercepted. Both objects are achieved by displaying (for registered purchasers and if enabled by the purchaser) a "1-click" ordering button alongside the description of an item. Clicking on this button sends an order for the item accompanied by a code identifying the purchaser. The server uses the code to reference the purchaser's address and payment details. Thus in a single action the item is ordered and the (registered) purchaser is identified. This means that the purchaser does not have to enter any further order or personal information (reducing interactions) and that no personal information can be intercepted (reducing sensitive information sent). This is essentially what is claimed in claim 1 of the main request.

The closest prior art describes how to implement a shopping cart. It describes the situation in the mid-90s when it was known that although the web and HTTP were good for entering, storing and displaying data required for online shopping, they were not good for shopping cart type applications because there was no mechanism for remembering any previous transactions. This was because HTTP was a stateless protocol. The prior art discloses three different ways of implementing a shopping cart:

1. a method using steps for selecting a list of items and steps for ordering that list;
2. shopping cart data is stored in a cookie, i.e. a text file, which is exchanged with every interaction between the client computer and the server;
3. the cookie is a "UserId" that links a user to shopping cart data and "more data about the user" stored in a database on the web server.

In the Board's view, the "**more data about the user**" mentioned in the third embodiment **might well fall under the claimed "purchaser-specific order information including said sensitive information"** so that the data itself is not distinguished over the prior art.

Term interpretations:
The Board agrees with the examining division that the **UserId** in the prior art **is rather a user identifier than a session identifier**, as the cookie in Listing Three is not generated each time there is a connection but is only generated if it was not sent along with a request or does not exist in the database. The claimed invention includes "a client identifier of the client system" so that the invention does not actually identify the purchaser either.

The checkout page that contains review information about the items anticipates the claimed simultaneous displaying of the item and the single action indication. This interpretation appears to arise, **not because the term "single action" is unclear**, but **because it is difficult to define the point from which the "single action" applies.** In the appellant's view, this point is supposed to be something that is not a checkout page, but the claim does not escape this interpretation.

Moreover, **the Board does not consider that the idea of reducing the number of steps necessary to make an order would contribute to inventive step**.

The **use of a cookie to look up "more data about the user**", does **not unambiguously disclose** that this data **replaces the identification information** that the purchaser enters **when placing an order**. Thus, the Board judges that this is a distinguishing feature over the prior art.

The prior art must **necessarily complete the order at the server system by adding purchaser-specific order information** including sensitive information. However, it does **not disclose** that this information is the "**more data about the user**" **mapped to the client identifier** received from the client system (cookie).

Conclusion:
The Board therefore considers that the **subject-matter of claim** 1 **differs** from the prior art in that the **purchaser's identification information is not inputted when ordering** the item, but **looked up** in the customer table **using the client identifier** received from the client and that the "**single action**" indication is **only sent if it is "enabled**".

These features can be seen to **solve** the problems to **reduce the number of user interactions** involved in selecting items, which makes e-commerce easier, faster and more comfortable, and also to **reduce the amount of sensitive information** sent over the Internet, which may be intercepted. In the Board's view the **skilled person would have tried to solve** these problems because they are **both explicitly mentioned in the comment** referred to by the examining division in "Listing One": "In a production system you could read this data [shipping data including the user's name and payment data] from a registered user database and not require users to input shipping and payment data each time. This also increases security."

This essentially **refutes the appellant's argument** that the idea of the **invention went against the thinking at that time** about internet security because it dispensed with the need for the purchaser to identify or authenticate himself. Although the **idea** behind the invention **might not have been commonly known**, the **programmer** in the prior art had **in fact already realized that it actually increased security**.

Moreover, it was known at the priority date to use cookies to keep track of purchaser-specific data. In view of the **indexing function of cookies**, the skilled person would have **realised that any sensitive data traditionally requiring a login could be accessed by cookies**. The **obvious trade-off** between the two processes, namely **security vs. simplicity, cannot establish an inventive technical contribution.**

In appeal, the appellant argued the single-action order possibility meant that items could be purchased inadvertently so that it was apparently a necessary feature to mitigate some purchasers' apprehension about the lack of security inherent in such a single-action possibility. However, this **merely shifts the responsibility for the security to the purchaser** who judges whether the single-action ordering should be enabled or not. The **decision not to enable it might depend on whether the purchaser's computer is used by other people who should not be allowed to order items on the computer owner's account**.

Such a **decision relates to forms of human behaviour and thinking that fall under mental acts, which are excluded from patentability.** According to the jurisprudence of the EPO (see e.g. G 3/08 at point 10.13.2) these **cannot contribute to inventive step.** Its implementation by means of a determination and a conditional sending step are clearly routine matters of design and also cannot contribute

Finally, the Board notes that a **long felt want is often an indicator of inventiveness,** usually overshadowing aspects of commercial success. However, in the present case, according to the prior art **cookies were first proposed in 1996 shortly before the invention was made**. Thus the invention was **not a situation of a long felt want, but more an immediate application of this new programming feature** as soon as it had become available in that field. In the Board's view, this outweighs the fact that the invention was subsequently very successful.

Even if claim 1 can be distinguished or seen to be distinguished over the prior art by the lack of an intermediate page in the purchasing process, this difference would concern **omitting confirmation steps in an ordering process**. Quite **apart from the question** of whether **omitting steps would be obvious** in the light of the general desire to simplify computer interactions, the Board considers that **such steps relate to a method of doing business** and, moreover, optional ones depending on the user's preferences. Again, such steps **cannot contribute to inventive step.**

Thus, in the Board's view, the subject-matter of claim 1 would have been obvious to a skilled person

Application number: 01113935.9
IPC Class: G06F 17/60, G06F 3/033
Applicant name: Amazon.Com, Inc.
Cited decisions: G 0003/08

T 1006/09 (Customer service centre/GENESYS) of 20.5.2011
System for routing instant messages from users in a customer service group

Inventive step (first auxiliary request) - yes

http://www.epo.org/law-practice/case-law-appeals/pdf/t091006eu1.pdf

According to the appellant, the purpose of this invention is to enable a call centre to cope with multiple instant messaging systems that may be used by the clients.

Claim 1:

A proxy server for routing instant messages sourced from clients connected to a datapacket-network to selected ones of a plurality of customer service representatives connected to the network and representing an enterprise:
at least one bi-directional data port for receiving data thereto and sending data there from;
at least two different versions of instant messaging software executable therein for generating, sending, and receiving instant messages;
a software routing component executable therein for routing client instant message requests to selected IP addresses on the network; and
characterized in that the proxy server **determines the different versions of instant messaging software for each client** and interacts with the clients using the version of instant messaging software determined to obtain information from the client for routing by requesting execution of at least one intelligent routing routine on behalf of the client requests and information obtained through the interaction with the clients; and
routes the client requests from the proxy server to an appropriate customer service representative workstation **having a like version** of instant message software as the client's request being received based on results of routine execution.

The closest prior art available to the board for the claims of the first auxiliary request discloses the handling of customer interaction requests to a customer service centre with customer service representatives. Interaction may be via the Internet. Web page chat, via a browser application, may be used for such requests.

At least the following features of claim 14 are **not disclosed by the closest prior art**:

- two different instant messaging software versions

Although the web page chat may be called an "instant messaging" application, there is **no indication of the use of two different versions** of such an application; in fact, it is clear that there is **only one version available** to the clients, i.e. the web page chat that is offered as a browser application.

- a determination which instant messaging software version is used by the clients

Such a **determination is not necessary**, as no instant messaging application is running at the client's side. The clients are forced to use the web page chat that is made available to them as a browser application and that **comes only in one version**.

- routing the client request to a customer service representative workstation having a like instant messaging software version as the client

There are **no different instant messaging software versions** and routing can, therefore, **not be based on that criterion**.

There is no immediate reason why the person skilled in the art would amend the system of the closest prior art to make an identification of the instant messaging version possible. The **problem** solved with respect to the prior art is to **replace use of a particular in-built chat function by use of one of a plurality of instant messaging systems available on the Internet.** While the **skilled person arguably could come to the claimed solution** once the problem is posed, the board takes the view that this **problem would not arise in a natural way**, starting from the closest prior art and taking into account normal circumstances and also the other prior art documents available.

In the **prior art** a proprietary in-house program called "CyberCall PowerAgent" on the business web page is used to handle all web communications. **No identification of the software used on the client's side is, therefore, required or even useful**. There is **no apparent reason why the skilled person would want to introduce** such an identification in this specifically disclosed embodiment.

In fact, the **skilled person would need to make abstraction from the example** given in the closest prior art and **look only at the general teaching** that is given in the **introductory part** of the description of that document. He (or she) would then **need to interpret the word "chat" in a broad sense** and imagine a situation where the clients have different instant messaging software, causing problems for the service centre. Finally, he **would have to conclude** that, in such a situation, it is **necessary to identify which software is used**. This is something that the **skilled person, obviously, could do** but the board does **not find it at all persuasive** that, starting from the teaching of the closest prior art, **he would do it**.

Application number: 02761182.1
IPC Class: G06F 15/16
Applicant name: Genesys Telecommunications Laboratories, Inc.

T 0698/07 (Collecting feedback from online auction users/EBAY) of 9.2.2011

Method and system for harvesting feedback and comments regarding multiple items from users of a network-based transaction facility

Inventive step - No

http://www.epo.org/law-practice/case-law-appeals/pdf/t070698eu1.pdf

It was known in the prior art that users of client machines could provide feedback to a network-based transaction facility via a web page for traded items. The closest prior art teaches to use an interface in the form of a window display on a user's computer for sending feedback to the provider of a product or service.

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

"A method of harvesting feedback information pertaining to transactions facilitated by a network-based transaction facility (10) from a client machine (32), the method including:

identifying at the network-based transaction facility (10) a plurality of transactions associated with a first user;

communicating user interface information from the network—based transaction facility to the client machine (32) via a communications network (34), the user interface information including transaction information concerning at least first and second transactions of the plurality of transactions and the user interface information specifying to the client machine a feedback interface (110; 112; 114; 116) facilitating user input of the feedback information for each of the at least first and second transactions of the plurality of transactions, and

receiving at the network-based transaction facility the feedback information, provided through the feedback interface (110; 112; 114; 116), for each of at least the first and second transactions, the feedback information being received via the communications network (34)."

The board agrees with the finding that the subject-matter of claim 1 is a **mix of technical and non-technical features.**

In the board's judgment, the **non-technical features consist in the nature of the data which is stored in the network-based facility ("transactions"), included in the user interface ("transaction information"), and inputted by the user ("feedback information").** These **non-technical features relate to the harvesting of feedback** pertaining to transactions, **representing essentially a commercial objective**, therefore r**elating to unpatentable subject-matter** as defined in Article 52(2)(c) EPC. Thus, **these features do not contribute to any technical effect**. According to the case law of the boards of appeal (see e.g. T 641/00), these features **cannot support the presence of inventive step** and are therefore to be **disregarded in the assessment of inventive step**.

However, the non-technical features of claim 1 are already known from the closest prior art and in any case, for this reason alone, cannot support the presence of an inventive step.

The **differences** between the subject-matter of claim 1 and the closest prior art are that the **user interface** of claim 1 **includes information concerning at least two transactions associated with the user, instead of a single one, and that the user interface enables the user to input feedback information for the at least two transactions, instead of enabling the user only to enter feedback for a single transaction.**

The **technical effect** of these differences is that **the user can input feedback information related to two transactions using a single interface.**

The **technical problem** can thus be formulated, based on this technical effect, as **how to improve the ease of use for the user of the feedback scheme.**

The skilled person starting the **closest prior art** and trying to solve this problem would get a hint that it is **possible for the user to input multiple feedbacks related to a transaction within the same feedback window using "number options"**. In the board's judgment, it is **obvious that the skilled person, aware of this teaching, would consider designing a feedback window enabling the input by a user of multiple feedbacks related to multiple transactions associated with the user.**

For these reasons, claim 1 does not involve an inventive step.

Application number:	01913244.8
IPC Class:	G06F 1/00
Applicant name:	Ebay, Inc.
Decision cited:	T 0641/00

T 0004/08 (Refreshing browswer pages/SAP) of 2.3.2011
Method and system for refreshing browser pages

Inventive step (no)

The patent application relates to a method for modifying a document object model (DOM) hierarchy in a browser at a client by identifying a change of a user interface (UI) element, determining whether the change of the UI element can be applied to the DOM hierarchy by using a delta renderer, if the change can be applied by using the delta renderer, finding in the DOM hierarchy the node that is referenced by the UI element and modifying at least one attribute related to the node according to the change by using the delta renderer, else, setting a dirty flag.

The first part of claim 1, which the appellant has acknowledged as prior art, represents a reasonable starting point for the assessment of inventive step. From this starting point, the invention amounts to this: when an event requires a change in the DOM, first check to see whether this can be effected by a delta renderer; if it can, then do it that way; if it can't, set a flag.

A delta-renderer is a collection of setter functions which can modify attributes of DOM nodes directly. That is, the delta renderer is a subset of the set of those functions which can modify the DOM representation of a UI element directly. It is common ground that such **setter functions were well known**.

The question of inventive step comes down to this: would it have been obvious to the skilled person, concerned with the speed of updating to the DOM, first to try a reduced set of functions (the delta renderer), which are expected to be simple to apply and to indicate when this fails?

The Board's view is that this would have been obvious. **A function's complexity is one of the things the skilled person, a computer programmer, considers daily**. She is **aware** that **some functions are simpler and faster to apply than others**. She would expect that working entirely with such functions would generally be faster than working with more complicated functions. Thus she would formulate the idea of **first trying some simple functions**. It is inherent in the concept of trying, that the simple functions may be insufficient. A **programmer knows quite well** that the set of **things that can be done with a small set of functions may be strictly smaller than the set of things which can be done with more functions**. It would **follow naturally**, that the **fact that the delta renderer is insufficient must be indicated**. That is all that the flag does in the main request.

Application number:	02026855.3
IPC Class:	G06F 17/30
Applicant name:	SAP AG