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**Datasheet for the decision
of 4 December 2013**

Case Number: T 1510/10 - 3.5.01

Application Number: 08166964.0

Publication Number: 2437207

IPC: G06Q10/00

Language of the proceedings: EN

Title of invention:

Method and arrangement for ranking of live web applications

Applicant:

Telefonaktiebolaget LM Ericsson (publ)

Headword:

Ranking of live web applications/ERICSSON

Relevant legal provisions:

EPC 1973 Art. 56

Keyword:

Inventive step - (no)



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

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Case Number: T 1510/10 - 3.5.01

**D E C I S I O N
of Technical Board of Appeal 3.5.01
of 4 December 2013**

Appellant: Telefonaktiebolaget LM Ericsson (publ)
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 25 February 2010 refusing European patent application No. 08166964.0 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman: S. Wibergh
Members: P. Scriven
D. Prietzel-Funk

Summary of Facts and Submissions

- I. This appeal is against the Examining Division's decision, according to the state of the file, to refuse European patent application 08166964.0. The Examining Division referred to a prior communication containing several objections to the main and four auxiliary requests, in particular related to Art. 56 EPC 1973.
- II. With the statement setting out its grounds of appeal, the appellant requested that the Examining Division's decision be set aside, and that a patent be granted on the basis of a main or one of four auxiliary requests. They are identical to the requests underlying the Examining Division's decision. The appellant also requested that oral proceedings be held, if neither the main nor any of the auxiliary requests was allowed.
- III. Claim 1 according to the main request reads as follows:

A method for a communication device of ranking a plurality of live web applications of the communication device, comprising:

receiving (130) at least one data stream, having a content and being associated with a corresponding one of the plurality of live web applications;

evaluating (140) the content of the at least one data stream;

updating (160) the corresponding live web application based on the content of the at least one data stream;

determining (180) whether any user reaction occurs, via a user input means of the communication device, with the corresponding live web application in association with the updating of the corresponding live web application, wherein the

user reaction consists of accessing the corresponding live web application;

using machine-learning algorithms to determine a type of information comprised in the evaluated content as user-relevant information for the communication device based on the determination of whether any user reaction occurs via the user input means of the communication device; and

ranking (150) the plurality of live web applications relative to each other based at least on a mapping between the evaluated content of the at least one data stream and the type of information determined as user-relevant information.

- IV. Claim 1 according to the first auxiliary request reads identically, except for the step of *determining* (emphasis added):

...

*determining (180) whether any user reaction occurs, via a user input means of the communication device, with the corresponding live web application **while the content is accessible via** the corresponding live web application, wherein the user reaction consists of accessing the corresponding live web application;*

...

- V. Claim 1 according to the second auxiliary request also reads identically except for the step of *determining* (emphasis added):

...

determining (180) whether any user reaction occurs, via a user input means of the communication

device, with the corresponding live web application **while the content is accessible via** the corresponding live web application, wherein the user reaction **consists of clicking or tapping on a symbol to access the corresponding live web application;**

...

VI. Claim 1 according to the third auxiliary request reads:

A method for a communication device of ranking a plurality of live web applications of the communication device, comprising:

receiving (130) at least one first data stream, having a first content and being associated with a corresponding first one of the plurality of live web applications;

evaluating (140) the first content of the at least one first data stream;

updating (160) the corresponding first live web application based on the first content of the at least one first data stream;

determining (180) whether any user reaction occurs, via a user input means of the communication device, with the corresponding first live web application in association with the updating of the corresponding first live web application, wherein the user reaction consists of accessing the first live web application;

using machine-learning algorithms to determine a type of information comprised in the evaluated first content as user-relevant information for the communication device based on the determination of whether any user reaction occurs via the user input means of the communication device;

receiving (130) at least one second data stream, the second data stream having a second content and being associated with a corresponding second one of the plurality of live web applications;
evaluating (140) the second content of the at least one second data stream; and
ranking (150) the plurality of live web applications relative to each other based at least on a mapping between the evaluated second content of the at least one second data stream and the type of information determined as user-relevant information.

VII. Claim 1 according to the fourth auxiliary request reads identically to that according to the third, except for the step of *determining* (emphasis added):

...
determining (180) whether any user reaction occurs, via a user input means of the communication device, with the corresponding first live web application while the content is accessible via the corresponding first live web application, wherein the user reaction consists of **clicking or tapping on a symbol to access the corresponding live web application;**
...

VIII. The Board arranged for oral proceedings. In a communication sent with the summons, the Board informed the appellant of its provisional view of the case, in particular regarding the issue of technicality.

IX. The appellant informed the Board that it would not be represented at the oral proceedings.

X. The appellant's arguments can be summarized as follows.

Document D1 (US2007/0008956) did not disclose, at least, the determination of whether or not a user reacts [to the updating of a web application on the receipt of new information from its data stream], the reaction consisting of accessing the application, or the use of machine learning based on such a determination. In D1, there was no connection between the user accessing an application and any assessment of information as relevant to the user.

Document D2 (extract from CNN.com) disclosed neither the use of machine learning to determine a type of information as relevant to a user, nor ranking on the basis of type.

D1 represented the closest prior art. The invention rendered the method disclosed in D1 more automatic, because the user did not have to say what types of information he was interested in. The objective technical problem was "how to rank live web applications so that applications that have a content that is considered relevant to a particular user is highly ranked (even if they have never or only rarely been accessed by the user)." The solution involved technical considerations, for example how to use data about access to one application in the ranking of other applications; and the use of machine learning.

Reasons for the Decision

Introduction

1. The invention concerns the presentation of information (the application refers to it as "content" in "live web applications") received from a data stream.
2. As the application explains, in paragraphs [0008] - [0009] and [0048] - [0049] of the published application, there may not be enough space on a screen to present all the information. Thus, the invention seeks to rank the information so that the most important (perhaps) or most interesting (perhaps) can be presented. It is acknowledged prior art that ranking can be based on user preferences or popularity (paragraph [0012] of the published application).
3. The invention seeks a better ranking, by taking account of users' reactions and using "machine learning" to find out what sorts of information the user responds to. For example, as explained in paragraph [0049] of the published application, a "news widget" might receive information rather frequently, but the user might only be interested in news about some subjects and, therefore, wants a high ranking when the news is about one of those subjects, and a low ranking otherwise. According to the invention, when an application has new information, and the user reacts by accessing the application, the rank of the relevant type of information may be increased. Similarly, if the user does not access the application, the rank of the relevant type of information may be decreased.

The second auxiliary request

4. It is convenient to consider claim 1 according to this request first, because it is more narrowly defined than that according to the main and first auxiliary requests.
5. The application acknowledges that ranking on the basis of a user's preferences for information of a particular type, is prior art. Indeed, that is the starting point for the invention as set out in the description (paragraphs [0012] - [0013] and [0048] - [0049] of the published application). That means that the steps of receiving a data stream, evaluating its contents, updating the application, and ranking belong to the prior art.
6. What the application presents as new is how the device comes to know the user's preferences. According to the invention, the device determines whether or not the user reacts - by clicking on, or tapping, its icon - to the updating of an application; it then uses "machine learning" to determine the type of information involved.
7. The Board does not consider the presentation of information and the observation of how someone reacts to it as technical. The claim does specify a technical realisation, in terms of detecting clicks or taps on an icon, but it is silent as to how the device can tell whether the click or tap is associated with the updating of the application. In the Board's view, however, that does not matter, because detecting a reaction is not technical and the technical realisation (detecting clicks or taps) was notorious.

8. The claim does not define any particular method of machine learning. Nor does the application as a whole describe one. Rather, machine learning as such is presented as known (paragraphs [0094] - [0095] of the published application), and it is left to the skilled person to implement it in any way that works. Thus, no inventive step can derive just from the use of machine learning. The invention uses a novel input, namely the information that the user has, or has not, reacted. As already noted, that is motivated by non-technical considerations and so cannot contribute to inventive step. Once the non-technical decision had been taken to use reactions as a basis, the technical realisation would have been obvious.

9. The appellant's arguments concern the relevance of documents D1 and D2, but do not address inventive step taking the starting point set out in the application. That approach was set out by the Board in the communication accompanying the summons to oral proceedings, and the appellant has not availed itself of its opportunities to comment on it.

10. The Board concludes that the method defined by claim 1 of this request does not involve an inventive step (Article 56 EPC 1973).

The main and first auxiliary requests

11. In both of these requests, claim 1 is broader than that according to the second auxiliary request. The methods defined in these two versions of claim 1, therefore, also lack an inventive step.

The fourth auxiliary request

12. Again, it is convenient to treat this request before turning to the third auxiliary request. The reasons are similar to those set out above for the second auxiliary request.
13. It is useful to compare claim 1 with the version according to the second auxiliary request. A first stream is received and evaluated, and the user reacts or not (as in the second auxiliary request), but the ranking is based on a second data stream, associated with a second application.
14. It is within the scope of the claim that the first and second streams (and their associated applications) need not be distinct. That is, the method defined by claim 1 according to the second auxiliary request falls within the scope of claim 1 according to the fourth auxiliary request. As a result, the lack of inventive step of the former applies to the latter.
15. Nevertheless, the Board would add that the idea of updating the ranking when a second stream is received is part of the prior art, which ranks according to information as it is received. Such updating also follows from the non-technical requirement that ranking be updated when new information is received.
16. The Board, therefore, concludes that the method defined by claim 1 according to the fourth auxiliary request does not involve an inventive step (Article 56 EPC 1973).

The third auxiliary request

17. Claim 1 according to this request is broader than that according to the fourth auxiliary request. Since the method defined by the latter does not involve an inventive step, that defined by the former cannot either.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



T. Buschek

S. Wibergh

Decision electronically authenticated