BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) [ ] To Chairmen
(D) [X] No distribution

Datasheet for the decision of 10 September 2013

Case Number: T 2325/09 - 3.5.06

Application Number: 05756673.9

Publication Number: 1769340

IPC: G06F 9/44

Language of the proceedings: EN

Title of invention:
Increasing portability of document-based user interface software objects

Applicant:
Icesoft Technologies Canada Corp.

Headword:
Interactive web pages/ICESOFT

Relevant legal provisions:
EPC Art. 123(2)
RPBA Art. 13(1)

Keyword:
"New requests not admitted because amended claims *prima facie* lack original disclosure"

Decisions cited:
-

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 2325/09 - 3.5.06

D E C I S I O N
of the Technical Board of Appeal 3.5.06
of 10 September 2013

Appellant: (Applicant)
Icesoft Technologies Canada Corp.
Whitewater Place
300, 1717 10th Street NW
Calgary, AB T2N 4S2 (CA)

Representative:
Hill, Justin John
Olswang LLP
90 High Holborn
London WC1V 6XX (GB)

Decision under appeal:
Decision of the Examining Division of the European Patent Office posted 6 July 2009 refusing European patent application No. 05756673.9 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: D. H. Rees
Members: M. Müller
W. Sekretaruk

Summary of Facts and Submissions

I. The appeal lies against the decision of the examining division, with written reasons dispatched on 6 July 2009, to refuse European patent application 05756673.9 for lack of an inventive step, Article 56 EPC 1973, over the document

D3: Betz K. *et al.*, "Developing Highly-Responsive User Interfaces with DHTML and Servlets", IBM T. J. Watson Research Center, 2000.

II. A notice of appeal was filed on 14 September 2009, the appeal fee being paid on the same day. A statement of grounds of appeal was received on 16 November 2009. The appellant requested that the decision under appeal be set aside and that a patent be granted based on claims 1-5 according to a main or one of two auxiliary requests as filed with the grounds of appeal. The appellant further submitted five annexes A-E intended to support its interpretation of the disclosure of D3 and the common knowledge and to establish alleged prejudices in the art at the priority date of the present application.

III. With a summons to oral proceedings, the board informed the appellant about its preliminary opinion. It raised a number of clarity objections, Article 84 EPC 1973, and, under this proviso, expressed the preliminary opinion that the independent claims according to all pending requests lacked novelty or an inventive step *inter alia* over document D3, Articles 54(2) and 56 EPC 1973. The board did not discuss the annexes A-E in substance, because this appeared not to be necessary given

that the board tended to agree with the central points the appellant tried to establish with them.

IV. In response to the summons, with letter dated 9 August 2013, the appellant filed amended claims 1-5 according to a main and two auxiliary requests. It requested the board of appeal to exercise its discretion in accepting these amendments as they were believed to address directly the issues identified by the board in its provisional opinion, and implicitly requested that a patent be granted based on the amended claims. The other documents on file are as follows:

description, pages	1-22	as published
drawings, sheets	1,3-6	as published
	2	as filed on 13 January 2009

V. Claim 1 according to the main request reads as follows:

"A computer server system comprising:

memory for storing a document comprising a set of objects, wherein at least one object is a user interface (UI) object, wherein the objects are represented on a display of a client computing system and a user interacts explicitly with the UI object on the display; and

a processor for communicating with the memory and with the client computing system, wherein the processor is configured for

receiving, from the client computing system displaying a representation of the document, a signal indicating an event that causes the UI object of the document to change state;

updating the UI object based on the state change; and

communicating only the updated UI object to the client computing system."

Claim 1 according to the first auxiliary request coincides with claim 1 of the main request, except that the last two steps relating to "updating" and "communicating" read as follows:

"... changing the UI object based on the state change;

updating a portion of the document based on the changed UI object; and

communicating only the updated portion of the document to the client computing system."

Claim 1 of the second auxiliary request reads as follows:

" A computer server system comprising:

memory for storing a document comprising a set of objects, wherein at least one object is a user interface (UI) object, wherein the objects are represented on a display of a client computing system and a user interacts explicitly with the UI object on the display; and

a processor for communicating with the memory and with the client computing system, wherein the processor is configured for:

communicating, to the client computing system, the document comprising the UI object at a first state, wherein the client computing system displays a representation of the document comprising the UI object according to the first state;

receiving, from the client computing system, a signal indicating an event that causes the UI object to change from the first state to a second state;

updating the UI object according to the second state; and

communicating only the second state of the UI object to the client computing system so that the client computing system redisplays only the updated UI object according to the second state."

VI. On 15 August 2013, a new representative indicated that he had taken over representation in the present case.

VII. At the oral proceedings nobody appeared for the appellant. The board postponed the planned opening of the oral proceedings and had the board's registrar contact the new representative by telephone to inquire whether his absence from the oral proceedings was deliberate. The representative confirmed this, explaining that he had been able to reach the appellant only the night before and had had the intention to inform the board accordingly. The oral proceedings then took place without anyone representing the appellant.

VIII. At the end of the oral proceedings, the chairman announced the decision of the board.

Reasons for the Decision

Appellant's absence from oral proceedings

1. According to Article 15(3) RPBA the board is not obliged to delay any step in the proceedings, including

its decision, by reason only of the absence at the oral proceedings of any party duly summoned. Therefore, and further in accordance with Article 15(3) RPBA, the board treats the appellant as relying only on its written case.

The invention

2. The application generally relates to interactive Web pages. In a typical situation, a Web page - claimed as a "document" - is stored on a server, retrieved from there by a client and rendered at the client side (see description, par. 5). When the Web page allows user interaction, changes made by the user must be reflected both on the server and on the client's screen. According to the application many known Web applications take every "significant user event" to the server; the server would first update the Web page in response to the user interaction and then return a markup string (*e.g.* in HTML or XML) based on which the entire document is re-rendered at the client (description, p. 3, lines 11-13). This setup causes undesirable "inefficiencies and delays" (*loc. cit.*) which the invention addresses. The invention intends to save bandwidth and computational load on the client by limiting communication and re-rendering to the part of the Web page that has actually changed.

2.1 The application discloses that both the server and the client store the document in terms of a so-called "document object model". The application explains this term by reference to the standard W3C DOM - the Document Object Model (DOM) according to the World Wide Web Consortium (W3C) - but stresses that it should be in-

terpreted more broadly than that; the invention was "likewise applicable for use in various other document object models" (p. 8, par. 26, and p. 11, lines 2-6).

2.2 Whenever users interacted with a document at the client side, signals indicating the user events were transmitted to the server which would then update its local document model to reflect the state changes caused by the user interaction (see, *e.g.*, p. 16, lines 4-8, and p. 18, lines 13-17). The updated server side model then were communicated to the client - after translation ("serialization") into a form suitable for network transmission - so that the client could adapt its local model and the display accordingly. Instead, however, of translating and communicating the entire document, only "the updated portion of the document object model" were translated and communicated to the client (see p. 18, 26-29).

Clarity

3. In the summons to oral proceedings the board had raised in particular two central clarity objections.

3.1 The board expressed its doubts that the term "document object model" - as used in the claims of all three requests at the time - was clear, Article 84 EPC 1973. It noted that the concept of a "document object model" might have been standardized by the W3C but that the standard had changed before the priority date of the present application. As a consequence, it questioned whether the term DOM, even with reference to the W3C standard, implied a well-defined, determinate set of features. It also suggested that the term "document

object model" alone, *i.e.* without reference to the standard, appeared to be even less specific. This term seemed to specify no more than a document modelled in terms of objects but to leave open, *inter alia*, whether these were objects in an "object-oriented" sense or simply components in a wider sense. For illustration, the board expressed its preliminary view that an HTML document could itself be viewed as the model of a "document" in terms of "objects". Regarding the claims of the then first auxiliary request which specifically referred to a document object model both on the server and on the client the board further noted that it appeared to be undefined whether both had to have the same form or not.

4. The board also expressed its doubts as to the clarity of the notion that "only" the identified change or the "updated portions" were communicated to the client.

4.1 The board first noted that what a "change" (or an "updated portion") was appeared to depend, at least partly, on what the model being changed was. In an "object-oriented" model a "change" could be the modification of an object's instance variables or an entire changed object. In a textual model in the form of, say, an HTML document, the change could be a piece of text and, presumably, its location within the document. Depending on its nature, a "change" might be more or less straightforward to determine and to communicate.

4.2 The board then expressed its preliminary opinion that it was a vague notion to specify that "only" the identified change or the "updated portions" was communicated. For illustration the board explained that if a

single word were modified in an HTML document, the identified change could be just the modified word but also the entire line of text or the complete paragraph containing the modified word; and if an instance variable of an object were modified, the "identified change" could be just the new value of that instance variable or the entire object. The board came to the preliminary conclusion that communicating "only" the identified change or updated portions meant at most that less than the entire document was communicated.

5. The amended claims filed by the appellant in response to the summons no longer contain the term "document object model" but define the "document" by way of the following formulation used in all three requests: *"a document comprising a set of objects, wherein at least one object is a user interface (UI) object, wherein the objects are represented on a display of a client computing system and a user interacts explicitly with the UI object on the display".*

The amended claims further offer alternative formulations relating to the issue of what the pertinent change is and what precisely is communicated from the server to the client. Specifically, the three requests respectively require that *"only the updated UI object"* (main request), *"only the updated portion of the document"* (first auxiliary request) or *"only the second state of the UI object"* (second auxiliary request)be communicated to the client computing system.

The board thus concurs with the appellant that the amendments address issues identified by the board in its provisional opinion. The appellant however gives

very little basis for the amendments in the original application documents.

6. Relating to the amended definition of the term "document", the appellant merely refers to paragraph [0040] of the specification (see submission dated 8 August 2013, p. 2, 2nd par.).

6.1 To begin with, paragraph 40 (which remains, as does the whole description, unamended from the original) refers to "components". In paragraph 38 (see p. 15, lines 1-3) it is disclosed that "a document ... includes one or more components", and in paragraph 40 again (p. 16, lines 3-4) it is disclosed that "a component may comprise a document-based user interface object".

The board is thus satisfied that paragraph 40 discloses "*a document comprising a set of objects, wherein at least one object is a user interface (UI) object*".

6.2 Paragraph 40 further discloses that "the user may interact with ... components 208, 210, 212 via their component representations 220 at the client side" (p. 16, lines 1-2 and 4-5). The reference signs indicate that the "components 208, 210, 212" of the document belong to the server side whereas the "component representations 220" refer to the client side (see original fig. 2).

The amended claims specify that the user "*interacts explicitly with the UI object on the display [of a client computing system]*", the UI object however being comprised in a document stored on the server, whereas the application in paragraph 40 discloses that what the

user interacts with at the client side is merely the "representation" of a "user interface object" comprised in a document stored on the server.

The board therefore cannot see that paragraph 40 discloses that the user "*interacts explicitly with the UI object on the display*". The board is also not aware of any other passage in the original application that would disclose this feature. The board thus concludes that the amended definition of the term "document" at least *prima facie* goes beyond the contents of the application as originally filed, in violation of Article 123(2) EPC.

7. Relating to the amended specification as to what is communicated to the client computer system, the appellant merely refers to figure 4. The board notes that the same support is given for each of the three different amendments (see submission dated 9 August 2013, p. 2, pars 5-6; p. 5, pars 2-3; and p. 6, pars. 3-4).

7.1 Figure 4 depicts a server 402 and a client system (400) connected via a network 404, the server storing a document and its components 408A-408C, the client storing the representation 409 of a component 408 (see also the pertinent par. 43 on pp. 17-18 of the description). Communication between the server and the client is depicted by way of arrows, but the update of the document model communicated from the server to the client is not specifically represented. Already for this reason, figure 4 alone cannot provide the alleged support for the feature in question.

7.2 The description relating to figure 4 further contains the already mentioned formulation that only "the updated portion of the document object model" is translated and communicated to the client (see p. 18, 26-29).

7.3 The board therefore concludes that the amendments of the main request, *"only the updated UI object"*, and of the second auxiliary request, *"only the second state of the UI object"*, is not disclosed in either original figure 4 or the corresponding original description; nor, again, is the board aware of any other passage in the original application that would disclose this language. The board therefore concludes that also the amended specification of what is communicated according to the main and the second auxiliary requests at least *prima facie* goes beyond the contents of the application as originally filed, in violation of Article 123(2) EPC.

7.4 Regarding the first auxiliary request, the board considers that the term *"updated portion of the document"*, while not literally supported by figure 4 and the pertinent description either, is a mere adaptation of the wording in paragraph 45, *"updated portion of the document object model"*, to the modified definition of the document in the claims. However, insofar as this amendment therefore does not cause a problem under Article 123(2) EPC of its own, it must be considered that the first auxiliary request does not address the board's objection regarding lack of clarity of the term "updated portion".

8. In summary, the board is of the opinion that the amended claims filed in response to the board's summons introduce new deficiencies under Article 123(2) EPC and,

at least in the case of the first auxiliary request, insufficiently address the board's objections raised in the summons to oral proceedings. The amendments therefore do not further the appeal proceedings. Hence, in view of the need for procedural economy, the board exercises its discretion under Article 13(1) RPBA so as not to admit the three pending requests.

9. There being no admitted requests, the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

A. Counillon D. H. Rees