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Datasheet for the decision
of 28 August 2014

Case Number: T 0710/09 - 3.5.07

Application Number: 04007011.2

Publication Number: 1471437

IPC: G06F17/21

Language of the proceedings: EN

Title of invention:
Image layout information determination

Applicant:
Seiko Epson Corporation

Headword:
Image layout/SEIKO EPSON

Relevant legal provisions:
EPC Art. 84, 54(1), 54(2)

Keyword:
Claims - clarity after amendment (yes)
Novelty - (yes)
Remittal to the department of first instance - (yes)

Decisions cited:

Catchword:

Case Number: T 0710/09 - 3.5.07

D E C I S I O N
of Technical Board of Appeal 3.5.07
of 28 August 2014

Appellant: (Applicant)	Seiko Epson Corporation 4-1, Nishi-shinjuku 2-chome Shinjuku-ku Tokyo 163-0811 (JP)
Representative:	MERH-IP Matias Erny Reichl Hoffmann Paul-Heyse-Strasse 29 80336 München (DE)
Decision under appeal:	Decision of the Examining Division of the European Patent Office posted on 30 October 2008 refusing European patent application No. 04007011.2 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman	R. Moufang
Members:	R. de Man
	M. Rognoni

Summary of Facts and Submissions

I.   The applicant (appellant) filed notice of appeal
        against the decision of the Examining Division refusing
        European patent application No. 04007011.2.

II.   In the reasons for refusing the application, the
        contested decision relied on the following documents:

        D1: "Broken image", January 2003, retrieved from the
             Internet: http://web.archive.org/web/
             20030121091318/http://de.selfhtml.org/html/
             grafiken/anzeige/broken_image.htm;
        D4: Taylor V.: "things NN won't do", September 2000,
             retrieved from the Internet: http://
             members.aol.com/browsercompare/nnwont/nnwont4.htm;
             and
        D5: Merchant D.: "Multiple submit using images", 1998,
             retrieved from the Internet: http://
             web.archive.org/web/19981207005950/http://
             www.mountaindragon.com/html/formimage.htm.

        In respect of the then main request, the Examining
        Division came to the conclusion that claims 1 and 5
        were not clear and that the subject-matter of claims 1
        to 6 was not new in view of commonly available web
        browsers such as Internet Explorer. In respect of the
        then auxiliary request, it came to the conclusion that
        claims 1 and 3 were not clear and that the subject-
        matter of claims 1 to 3 was not new, again in view of
        commonly available web browsers. Documents D1, D4 and
        D5 were used to illustrate features of web browsers as
        commonly available at the priority date.

III.   With the statement of grounds of appeal, the appellant
        filed a main request and an auxiliary request. It

requested oral proceedings in case the Board intended to dismiss the appeal.

IV.   In a communication accompanying a summons to oral proceedings, the Board expressed the provisional opinion that both the main request and the auxiliary request did not comply with Article 123(2) EPC and Article 84 EPC. It further indicated that the novelty and inventive step reasoning presented in the contested decision would not apply to clarified claims properly representing the invention.

V.   With a letter dated 25 April 2014, the appellant replaced its claim requests with a single set of claims 1 to 4.

VI.   In a further communication, the Board drew the appellant's attention to some remaining clarity problems and asked it to clarify whether it maintained its request for oral proceedings in case the Board was minded to remit the case to the department of first instance for further prosecution.

VII.   With a letter dated 21 May 2014, the appellant replaced the claims on file with amended claims 1 to 4. As a main request, it requested that the decision under appeal be set aside and that the case be remitted to the Examining Division for further prosecution. As an auxiliary request, oral proceedings were requested.

VIII.   The Board cancelled the oral proceedings. In a telephone conversation between the representative and the rapporteur held on 22 May 2014, the appellant's attention was drawn to two editorial mistakes in the latest set of claims. The appellant filed a corrected set of claims with a letter dated 23 May 2014.

IX.   Independent claim 1 reads as follows:

"An image rendering system, comprising

    an analysis means (21) for analyzing a document described in a structured tag language, the document representing an image to be rendered, and extracting therefrom objects constituting the image;

    an image rendering means (23) responsive to image rendering commands that the image rendering means (23) is able to use, to perform image rendering corresponding to the image rendering commands; and

    a layout means (22) for determining coordinate positions of the extracted objects constituting the image, and for outputting to the image rendering means (23) layout information including image rendering commands for rendering the extracted objects in their positions,

    characterized in that:

    the layout means includes

    - an inquiry function adapted to place an inquiry with the image rendering means (23) as to whether a respective extracted object can be rendered or not, and

    - a simulation function adapted to simulate image rendering, when the respective extracted object cannot be rendered, by using objects that can be rendered by the image rendering means (23), and to output to the image rendering means (23) layout information including image rendering commands resulting from the simulation; and

    the image rendering means (23) is adapted to receive the inquiry from the layout means (22) and to inform the layout means (22) about whether or not an image rendering command corresponding to the respective extracted object is among a set of predetermined image

rendering commands that the image rendering means (23)
is able to use."

Claim 2 is dependent on claim 1.

Independent claim 3 reads as follows:

"An image rendering method performed in an image
rendering system comprising an analysis means (21), an
image rendering means (23) and a layout means (22), the
image rendering method comprising

analyzing, by the analysis means (21), a document
described in a structured tag language, the document
representing an image to be rendered, and extracting
therefrom, by the analysis means (21), objects
constituting the image; and

determining image rendering coordinate positions
of the extracted objects constituting the image using
the layout means (22), and outputting, by the layout
means (22), to the image rendering means (23) layout
information including image rendering commands for
rendering the extracted objects in their positions,
        characterized by:
inquiring with the image rendering means (23), by
the layout means (22), as to whether or not a
respective extracted object can be rendered or not,

receiving, by the image rendering means (23), the
inquiry and informing the layout means (22) about
whether or not an image rendering command corresponding
to the respective extracted object is among a set of
predetermined image rendering commands that the image
rendering means (23) is able to use; and

simulating image rendering by the layout means
(22), when the respective object cannot be rendered, by
using objects that can be rendered by the image
rendering means (23), and outputting, by the layout

means (22), to the image rendering means (23) layout
information including including image rendering
commands resulting from the simulation."

Independent claim 4 reads as follows:

"A program for causing a computer to execute the image
rendering method according to claim 3."

Reasons for the Decision

1.   The appeal complies with the provisions referred to in
        Rule 101 EPC and is therefore admissible.

2.   *The invention*

2.1   The invention relates to the rendering of documents
        described in a structured tag language such as HTML,
        XHTML and XML. The background section of the
        application discusses a system (known from JP
        2002/091726) for rendering such documents. This system,
        which may be a printing system, comprises:

        -       analysis means for parsing the document and
                identifying "objects" such as text, images,
                borders, buttons;

        -       layout means for generating layout information
                which comprises for each object the coordinate
                position at which it should be rendered;

        -       rendering means for rendering each object on the
                basis of the generated layout information.

This system is referred to in the present application as "image rendering system". Its rendering means is referred to as "image rendering means".

2.2   The application explains on page 2, lines 6-25, that the image rendering means of an image rendering system may be limited in the kinds of objects (or "image rendering components") it can render.

The object of the invention is therefore to provide an image rendering system capable of rendering documents in a structured tag language comprising objects that its image rendering means cannot render.

The proposed solution is to provide the layout means of the image rendering system with an "inquiry function" and a "simulation function". The inquiry function inquires with the image rendering means whether it can render a particular object extracted from a document, which essentially depends on whether the image rendering means supports an "image rendering command" corresponding to the type of the object. For an object that the image rendering means cannot render, the simulation function of the layout means simulates image rendering of the object by using objects that can be rendered by the image rendering means. The description on page 12, lines 5-9, gives as an example the simulation of an image rendering command for a text box object using an image rendering command for a border object and an image rendering command for a text object.

3.   The sole claim request consists of claims 1 to 4 filed with the letter dated 23 May 2014.

Present claims 1 to 3 are based on claims 1 to 3 of the auxiliary request refused by the Examining Division for lack of clarity and for lack of novelty. The amendments to claims 1 to 3 address clarity objections raised by the Board.

Present independent claim 4 does not correspond to any of the claims of the auxiliary request refused by the Examining Division. However, the then main request as well as the main request filed with the statement of grounds of appeal already included an independent program claim.

The Board therefore exercises its discretion under Rule 13(1) RPBA to admit the request into the proceedings.

4.   In its letter dated 25 April 2014, the appellant provided detailed indications of a basis in the application as filed for claims substantially corresponding to the present claims. The Board is satisfied that the present claims comply with Article 123(2) EPC.

5.   *Clarity*

5.1   According to point 3.1 in combination with point 2.1 of the decision under appeal, the term "image rendering means" had no clear definition and it was not possible for the skilled person to understand which functionalities it implemented. The term "image rendering means" corresponded to means arbitrarily defined by the applicant.

5.2   The term "image rendering means" is defined in the preamble of present claim 1 as means that in response to certain "image rendering commands" performs

corresponding image rendering. In the Board's view, the preamble of present claim 1 defines a conventional system for rendering documents described in a mark-up language ("structured tag language"). Typically, such a document is first parsed using "analysis means" in order to determine constituent objects. The positions of these objects within the rendered document are then determined using "layout means". Finally, the objects are rendered at these positions using "image rendering means".

The Board therefore considers the term "image rendering means" as used in present claim 1 and corresponding claim 3 to be clear.

5.3   Point 2.1 of the decision under appeal mentions a further clarity problem, which however appears to apply only to the claims of the then main request and in any event not to the present claims.

5.4   In its communication accompanying the summons and in its further communication, the Board raised further clarity objections. These objections no longer apply to the claims as presently worded.

5.5   The Board concludes that the independent claims are now clear within the meaning of Article 84 EPC.

6.   *Novelty*

6.1   According to the decision under appeal, the subject-matter of claim 1 of the then auxiliary request lacked novelty in view of commonly available web browsers such as Internet Explorer. In point 2.3 of the decision, the Examining Division considered in particular that an inquiry function that inquired with the browser's image

rendering means whether a predetermined "object of a form" could be rendered or not was anticipated by implicit browser functionality that checked whether a particular image to be rendered could be rendered or not.

Documents D1 and D4 were cited as evidence of how web browsers dealt with images in web pages that cannot be displayed ("broken images"). Document D5 was cited in support of the argument that an image is a "typical form object". The "broken image" pictograms shown in documents D1 and D4 represented the result of simulated rendering.

In point 2.5 of the decision, the Examining Division further argued, without providing written evidence, that the implicit browser functionality that checked for the availability of resources was not limited to checking for resources "on the web", but also checked for "resources on local file systems, GUI objects, font management systems, etc.". Since no standard definitions existed for the claimed layout means and image rendering means, one could "decide" that the latter included this implicit "resource availability checking means".

6.2   In the statement of grounds of appeal, the appellant submitted *inter alia* that the display of a broken image implied that the browser placed an inquiry with an image source, e.g. a web server in the World Wide Web, that was expected to provide the required image file to the browser. This image source was clearly not an image rendering means in the sense of the application. This criticism of the Examining Division's novelty reasoning was also included in the appellant's submission in

response to the summons to oral proceedings before the Examining Division.

6.3   The Board agrees with the appellant's submission. According to claim 1, the layout means includes functionality ("inquiry function") for placing an inquiry with the image rendering means and the image rendering means includes functionality for responding to this inquiry. The novelty reasoning presented in the decision under appeal equates the "resource availability checking means" both with the functionality included in the layout means (see point 2.3 of the decision) and with the functionality included in the image rendering means (see point 2.5 of the decision). This appears to be how the Examining Division attempted to circumvent the appellant's criticism, but is clearly not correct.

6.4   The Board sees further differences between the claim and the prior art on which the Examining Division relied. According to present independent claim 1 (as well as claim 1 of the auxiliary request on which the decision was based), the image rendering means responds to a received inquiry by informing the layout means "about whether or not an image rendering command corresponding to the respective extracted object is among a set of predetermined image rendering commands that the image rendering means is able to use". This feature makes clear that the response to an inquiry whether or not a particular object can be rendered is dependent on the type of the object: is the object of a type for which a suitable rendering command is available?

The resource availability checking on which the Examining Division relied is not of this kind.

According to document D4, page 1, "broken images" are images that "do not load for one reason or another, usually because the graphic file is not where the IMG tag is pointing". If a particular image object cannot be rendered, that is not because objects of the type "image" cannot be rendered, but because that particular image object is not (or no longer) available for download at the URL specified in the HTML document being rendered. The claimed inquiry functionality is therefore not comparable with the "resource availability checking" discussed in the contested decision.

6.5   The Board further agrees with the appellant that the conventional handling of "broken" (i.e. missing) images does not "simulate" rendering of those images. The "simulation" of claim 1 refers to the emulation, by the layout means, of a rendering command that the image rendering means does not support by invoking one or more (typically more elementary) image rendering commands that the image rendering means does support.

6.6   The Board concludes that the subject-matter of claim 1 and that of corresponding independent claims 3 and 4 is new within the meaning of Article 54(1) and (2) EPC with respect to the prior art considered in the decision under appeal.

7.   *Remittal*

The prior art considered by the Examining Division is directed to solving the problem of rendering "broken images". The present invention is not concerned with this problem, see in particular points 2.1, 2.2, 6.4 and 6.5 above. The first-instance proceedings, possibly including the search, have hence been based on an

incorrect interpretation of the invention. The Board therefore remits the case to the Examining Division for further prosecution and in particular for deciding whether an additional search needs to be carried out.

Order

For these reasons it is decided that:

1.   The decision under appeal is set aside.

2.   The case is remitted to the department of first instance for further prosecution.

The Registrar: The Chairman:

K. Boelicke   R. Moufang

Decision electronically authenticated