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**Datasheet for the decision
of 28 September 2018**

Case Number: T 0160/15 - 3.5.07

Application Number: 10156467.2

Publication Number: 2230607

IPC: G06F17/20, G06F17/30,
G06T15/00, G06T13/00

Language of the proceedings: EN

Title of invention:

Apparatus and method for creating animation from web text

Applicant:

Samsung Electronics Co., Ltd.

Headword:

Animation creation/SAMSUNG

Relevant legal provisions:

EPC Art. 56

Keyword:

Inventive step - both requests (no)

Decisions cited:

T 1670/07



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Case Number: T 0160/15 - 3.5.07

D E C I S I O N
of Technical Board of Appeal 3.5.07
of 28 September 2018

Appellant: Samsung Electronics Co., Ltd.
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 13 August 2014
refusing European patent application No.
10156467.2 pursuant to Article 97(2) EPC**

Composition of the Board:

Chair P. San-Bento Furtado
Members: R. de Man
M. Blasi

Summary of Facts and Submissions

I. The applicant (appellant) appealed against the decision of the Examining Division refusing European patent application No. 10156467.2.

II. The decision cited, *inter alia*, the following documents:

D1: US 2006/0217979 A1, 28 September 2006; and

D6: J. Yung-Jen Hsu and W. Yih: "Template-Based Information Mining from HTML Documents", Proceedings of the National Conference on Artificial Intelligence, 1997, pp. 256-262.

The Examining Division decided that the subject-matter of the independent claims of the then main request and auxiliary request lacked inventive step in view of the disclosure in document D1 and the common general knowledge of the skilled person and that claim 1 of the main request did not meet the requirements of Article 84 EPC. Document D6 was referred to as an illustration of the common general knowledge.

III. Along with the statement of grounds of appeal, the appellant submitted claims of a main request and of an auxiliary request. The main request was the main request refused by the Examining Division with a minor amendment. The auxiliary request was the auxiliary request refused by the Examining Division.

IV. In its written submissions, the appellant amended its requests by filing claims of a new main request and of a new first auxiliary request and commented on the Board's communication.

- V. In a further letter, the appellant informed the Board that it would not appear at the oral proceedings.
- VI. Oral proceedings were held on 28 September 2018 in the appellant's absence. At the end of the oral proceedings, the chair pronounced the Board's decision.
- VII. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the main request or the first auxiliary request.
- VIII. Claim 1 of the main request reads as follows:

"An apparatus for creating animation from a web text, generally including image content and text related to the image and being of a type of information from the group at least comprising: text information, video information, image information, media information and web information, the apparatus comprising:

- a script formatter (110), which is adapted
 - * to determine a domain format from a group of domain formats at least comprising: a recipe format, a diary format, news format, a scenario format, and a blog format, wherein the determination of the domain format is based on one or more tags included in the web text; said domain format being a data structure that can be understood by a computer and comprising content to be used to extract and classify data included in the web text according to the type of the web text;
 - * to reconfigure text and image contents of the web text into the computer understandable structure of the determined domain format; and
 - * to generate a domain format script from the web text using the computer understandable structure of the

determined domain format that corresponds to the type of the web text;

- an adaptation engine (120) adapted to generate animation contents using the generated domain format script; and

- a graphics engine (130) adapted to reproduce the generated animation contents in the form of an animation."

IX. Claim 1 of the first auxiliary request differs from claim 1 of the main request in that the following text has been added at the end of the claim:

"- a user interface, which is adapted to allow a user to enter a desired theme for the web text; and

- an animation content generation unit (230) having a presentation style generation unit (236) adapted to generate media style information indicating the style of the animation, wherein the adaptation engine is adapted to request setting information from the animation content generation unit (230) based on the input theme and generate the animation contents in correspondence with the desired theme entered by the user and based on the obtained setting information and the received media style information."

X. The appellant's arguments, where relevant to the decision, are discussed in detail below.

Reasons for the Decision

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

2. The appellant having been duly summoned to the oral proceedings, the oral proceedings were held in its absence (Rule 115(2) EPC), and it was treated as relying only on its written case (Article 15(3) RPBA).

3. *The invention*

The application relates to the creation of animation from "web text", which may, for example, be text information, video information, image information, media information or "web info".

First, a suitable "domain format" data structure is determined. On the basis of this "domain format", text contents and image contents are extracted from the web text to generate a "domain format script". Next, "animation contents" are generated on the basis of the "domain format script". The "animation contents" are then reproduced in the form of an animation.

Main request

4. *Interpretation of claim 1*

4.1 Claim 1 is directed to an apparatus for creating animation from a web text. It defines web text as "generally including image content and text related to the image and being of a type of information from the group at least comprising: text information, video information, image information, media information and web information". The Board notes that an HTML page falls within the scope of this definition.

The apparatus comprises a "script formatter", an "adaptation engine" and a "graphics engine".

4.2 The script formatter is adapted to determine a "domain format" for the web text on the basis of tags included in the web text. The domain format may, for example, be a recipe format, a diary format, a news format, a scenario format or a blog format. The determined domain format is a data structure "that can be understood by a computer and comprising content to be used to extract and classify data included in the web text according to the type of the web text".

The script formatter is further adapted to "reconfigure text and image contents of the web text into the computer understandable structure of the determined domain format" and to "generate a domain format script from the web text using the computer understandable structure of the determined domain format that corresponds to the type of the web text".

The Board understands a domain format to be a data structure for holding information extracted from a web text of a type corresponding to the domain format. For example, the recipe domain format, which is illustrated in Figure 3, is a data structure with data fields for storing information items such as "Dish information", "Ingredients" and "Instruction". If the script formatter detects that the web text contains a recipe, data corresponding to these items is extracted from the web text and stored in (or "reconfigured into") the appropriate data fields of the recipe domain format data structure. The result is referred to as a "domain format script".

4.3 The "adaptation engine" converts the "domain format script" into "animation contents".

4.4 The "graphics engine" reproduces the "animation contents" in the form of an animation.

5. *Inventive step*

5.1 Document D1 relates to the real-time generation of an illustrated or animated scene corresponding to natural-language input (see paragraph [0001]). It discloses a natural-language-to-illustration conversion system comprising a natural-language-processing (NLP) component and an animation engine (paragraph [0038]; Figures 2 and 3).

The NLP component processes statements entered into the system, determines a "logical form" corresponding to the linguistic character of the input and produces output in an XML format (paragraphs [0038] to [0051]; Figure 3).

The animation engine parses the XML-formatted output of the NLP component and selects relevant images from a graphics library (paragraphs [0051], [0052], [0056]; Figure 3). The scene, which may be animated, is then rendered (paragraphs [0051] and [0056]; Figure 3).

5.2 The functionality of the NLP component is similar to that of the claim's script formatter. It analyses textual data to determine a suitable XML format, which corresponds to the claimed "domain format" data structure, and produces data in that format by extracting relevant information items from the textual input data, thus generating a "domain format script". In the example shown in Figure 3, the NLP component determines that the input statement "A man kicked a ball in the cave" includes, as logical information items, an actor, an action, an object and a background.

It therefore produces XML output with actor, action, object and background tags and the relevant information items "man", "kicked", "ball" and "cave" extracted from the input statement as tag values.

In its written submissions in response to the Board's communication, the appellant referred to the "novel feature of reconfiguring the web text into the data structure of a domain format", but it did not explain why that feature did not correspond to extracting relevant information items from the entered textual data into an appropriate XML format. It did point out that the "templates" and "skeletons" referred to in paragraphs [0033] and [0073] of document D1 did not correspond to domain formats, but the Board's reasoning does not rely on those templates and skeletons.

- 5.3 The collection of relevant images by the animation engine of document D1 from a graphics library on the basis of the produced XML output corresponds to the functionality of the claim's adaptation engine.
- 5.4 The rendering of the animated scene by the animation engine corresponds to the functionality of the claim's graphics engine.
- 5.5 Hence, the subject-matter of claim 1 differs from what is disclosed in document D1 in that the input of the system is a "web text" and in that the domain formats recognised by the script formatter include formats referred to as "recipe format", "diary format", "news format", "scenario format" and "blog format". In addition, the determination of the domain format is "based on one or more tags included in the web text".

- 5.6 In the Board's view, the idea of changing the system's input from manually entered text to "web text", such as a well-known HTML page, is not driven by a technical motivation to solve a specific technical problem but merely reflects a non-technical, subjective desire. For a skilled person starting from document D1 and wanting to generate an animation on the basis of a web text, adaptation of the system of document D1 to accept an HTML page as input is obvious. And document D1 indeed states, in paragraph [0035], that any kind of natural-language input can be used.

When adapting the system of document D1 to accept HTML pages as input, it is obvious to take the HTML tags contained in the HTML page into account for determining the type of content of the HTML page, as HTML tags determine the structure of any HTML page.

The feature specifying that the domain format can be one of a "recipe format", "diary format", "news format", "scenario format" or "blog format" is not technical and can therefore not contribute to an inventive step.

- 5.7 The appellant argued that determining the domain format on the basis of tags was more reliable than what was possible in document D1.

The Board agrees that the use of tags is more reliable if the domain format is specified explicitly in the web text by means of an appropriate tag, as mentioned on page 5, lines 5 and 6, of the description of the application ("The web text may include one or more tags indicating the domain format type"). But claim 1 merely states that the determination of the domain format "is based on one or more tags included in the web text",

which requires only that the determination of the domain format take into account some kind of tag, such as a regular HTML tag.

- 5.8 In the statement of grounds of appeal, the appellant apparently assumed that the system of document D1 accepted only spoken input. This is not correct, as paragraph [0035] makes clear ("as a user types in a story ...").
- 5.9 Referring to point 1.6 of the reasons for the contested decision, which refutes the appellant's arguments in favour of inventive step, the appellant stated that it maintained those arguments without exception. A mere reference to a discussion in the decision under appeal of various arguments put forward in the course of the first-instance proceedings cannot, however, replace the required presentation of the appellant's case in the statement of grounds of appeal (Article 12(2) RPBA). The appellant also failed to explain why it disagreed with the Examining Division's refutations of its arguments. The Board therefore sees no need to investigate the extent to which those arguments are pertinent to the inventive-step reasoning given above.
- 5.10 Hence, the subject-matter of claim 1 lacks inventive step over the disclosure in document D1 (Article 56 EPC).

First auxiliary request

6. Claim 1 of the first auxiliary request adds the following features to claim 1 of the main request:
- a user interface adapted to allow a user to enter a desired theme for the web text; and

- an animation-content generation unit having a presentation-style generation unit adapted to generate media-style information indicating the style of the animation, wherein the adaptation engine is adapted to request setting information from the animation-content generation unit based on the input theme and generate the animation contents in correspondence with the desired theme entered by the user and based on the obtained setting information and the received media-style information.

7. *Inventive step*

7.1 The features added to claim 1 allow the user to specify a "theme" to be applied to the animation being generated. The adaptation engine applies the theme by obtaining "setting information" corresponding to the specified theme together with "media style information" from an "animation content generation unit" and generating the animation contents "based on" the setting and media-style information.

7.2 The Board agrees with the Examining Division that the concept (or wish) of allowing the user to apply a "theme" to animation contents being generated is not technical, as no specific technical problem is solved by the application of such a theme. In fact, the description discloses that the chosen theme influences non-technical cognitive elements of the generated animation such as whether the ingredients used in a cooking show are simple or luxurious (see page 11, line 24, to page 12, line 4). And in its written submissions in preparation for the oral proceedings, the appellant confirmed that the incorporation of themes served the purpose of "increasing the

entertainment value, effectiveness of communication and attractiveness for a user, as well as to increase the [chance] of achieving the objective of attracting a user's interest", which the Board considers to be a non-technical purpose.

- 7.3 In the statement of grounds of appeal, the appellant argued that a feature allowing the user to influence the end result using technical means was technical by nature. It presented the user with the technical possibilities of a technically more versatile system.

However, the technical implementation of a non-technical concept does not render the concept itself technical (see e.g. decision T 1670/07 of 11 July 2013, reasons 9).

- 7.4 In order to implement this non-technical concept, it is obvious to provide a suitable "user interface" that allows the user to specify the desired theme and to generate the "themed" animation contents on the basis of suitable information corresponding to the specified theme. Obtaining such information from a separate "animation content generation unit" software module, if technical at all, is a trivial implementation detail. In other words, the features added to claim 1 represent the obvious implementation of the non-technical concept.

- 7.5 Hence, the subject-matter of claim 1 of the auxiliary request lacks inventive step (Article 56 EPC).

Conclusion

8. Since neither request is allowable, the appeal is to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chair:



I. Aperribay

P. San-Bento Furtado

Decision electronically authenticated